

FAO: Its History and Achievements During the First Four Decades, 1945-1985

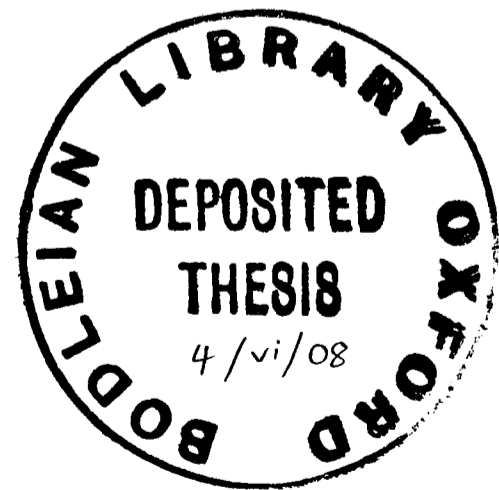
Margaret Rose Biswas

Balliol College

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Margaret Rose Biswas, Balliol College, D.Phil. in International Relations
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After a brief history of the United Nations Food and Agriculture Organization (FAO), most of the thesis deals with FAO's achievements during its first four decades 1945-1985 emphasizing the period 1970-1985. This thesis challenges the conventional wisdom during the 1970s and 1980s that FAO was too bureaucratic to accomplish much. The main argument of the thesis is that the bureaucratic nature of FAO was not excessive and did not prevent it from achieving its objectives. FAO made a substantial contribution to food and agriculture in developing countries, while also benefiting developed countries. Agriculture in this context included forestry and fisheries. FAO also made contributions beyond the capabilities of bilateral agencies.

According to its constitution, FAO had three main functions which were analyzed. The first was to collect, analyze, interpret and disseminate information. The second was to provide leadership as an international forum to promote and where appropriate recommend action to boost food production. The third function was to provide technical assistance. Furthermore, selective FAO achievements in a variety of subjects from soils to marketing were discussed. The two case studies provided an overview of FAO accomplishments in fisheries and animal health.

FAO achievements have failed to be recognized partly because its Information Division had not adequately found ways of conveying newsworthy activities to the media. This was notably the case in developed countries, although its work has found local reflection in the newspapers and television channels of developing countries where the Organization had projects.

The main source of information was FAO itself. The United States Department of Agriculture and State Department as well as Oxford University libraries had some useful documentation. Individual documents were obtained from a variety of sources. Interviews provided interesting insights.

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Dr. Michael Arnold who was an FAO staff member for decades provided helpful comments. Also appreciated are the interviews granted to me by over one hundred FAO staff members who prefer to remain anonymous. A number commented on parts of my thesis.

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ABBREVIATIONS

ACC	Administrative Committee on Coordination
ADCP	Aquaculture Development and Coordination Programme
ASFIS	Aquatic Sciences Fisheries Information and Systems
CAPH	Cooperative Action for Plant Health
CARPAS	Regional Fisheries Advisory Commission for the South-West Atlantic
CCP	Committee on Commodity Problems
CP	FAO/World Bank Cooperation Programme
CECAF	Fishery Commission for the Eastern Central Atlantic
CGIAR	Consultative Group on International Agricultural Research
CIFA	Committee for the Inland Fisheries of Africa
COFI	Committee on Fisheries
COPESCAL	Committee for the Inland Fisheries of Latin America
DANIDA	Danish International Development Agency
ECDC	Economic cooperation among developing countries
ECOSOC	Economic and Social Council
EIFAC	European Inland Fisheries Advisory Commission
EEZ	Exclusive Economic Zone
EEC	European Economic Commission
ETAP	Expanded Technical Assistance Programme
FAO	Food and Agriculture Organization
FFHC/AD	Freedom from Hunger Campaign Action for Development
FMD	Foot-and-mouth disease

FSAS	Food Security Assistance Scheme
GA	General Assembly
GESAMP	Group of Experts on the Scientific Aspects of Marine Pollution
GFCM	General Fisheries Council for the Mediterranean
IAEA	International Atomic Energy Agency
IBPGR	International Board of Plant Genetic Resources
IBRD	World Bank
ICCH	International Commodity Clearing House
IDA	International Development Agency
IDRC	International Development Research Centre
IEFC	International Emergency Food Council
IFPRI	International Food Policy Research Institute
IIA	International Institute of Agriculture
ILCA	International Livestock Centre for Africa
ILO	International Labour Organization
ILRAD	International Laboratory for Research on Animal Diseases
IOC	Intergovernmental Oceanographic Commission
IOFC	Indian Ocean Fisheries Commission
IOP	Indian Ocean Fishery Survey and Development Programme
IPFC	Indo-Pacific Fisheries Council
IPM	Integrated pest management
IRRI	International Rice Research Institute
ISP	Investment Support Programme

NIEO	New International Economic Order
OAU	Organization of African Unity
OAU/IBAR	Organization of African Unity, Inter-African Bureau for Animal Resources
OECD	Organization for Economic Cooperation and Development
OIE	International Office of Epizootics
OSRO	Office for Special Relief Operation, FAO
PFL	Post harvest food losses
RRC	Relief and Rehabilitation Committee, Ethiopia
SIDP	Seed Improvement and Development Programme
SIDA	Swedish International Development Agency
TCDC	Technical cooperation among developing countries
TCP	Technical Cooperation Programme
U.K.	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRO	United Nations Disaster Relief Organization
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Fund for Population Activities
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund

UNRRA	United Nations Relief and Rehabilitation Administration
UNRISD	United Nations Research Institute for Social Development
U.S.	United States
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
WCARRD	World Conference on Agrarian Reform and Rural Development
WFP	World Food Programme
WECAFC	Western Central Atlantic Fishery Commission

CHAPTER 1

INTRODUCTION

The principal primary sources relied on in the following pages were:

1. Boerma, Addeke H., with the collaboration of Colin Mackenzie, *A Right to Food: A Selection from Speeches*, FAO, Rome, 1976.
2. Toynbee, Arnold J., 'Man and Hunger; the Perspective of History: Address to the World Food Congress, Washington, D.C., June 1983' in *FAO Studies in Food and Population*, FAO, Rome, 1976.

A common view of the United Nations Food and Agriculture Organization (FAO) during the period 1970-85 was that of a large bureaucracy which was especially ineffective for developing countries and no more than a charity of rich nations. This thesis points out the error in the conventional wisdom regarding FAO during 1970-1987, that it was too bureaucratic to be effective. The central argument is that the bureaucratic nature of FAO was not excessive and did not prevent it from achieving its objectives as described in later chapters on information, FAO as a forum and technical assistance.

Talbot and Moyer wrote a notable rebuttal of FAO as a bureaucracy 'overstaffed, overpaid, and unimaginative'.¹ FAO has certainly experienced some bureaucratic rigidity, but not to extremes. It was remarkable that an international expert, a Member of Parliament, Minister and Oxford academic, Evan Luard omitted discussion of FAO in his book on the international agencies,² telling the

1. Ross B. Talbot and H. Wayne Moyer, 'Who Governs the Rome Food Agencies?' *Food Policy*, vol. 22, no. 4, November 1987, p. 362.

2. Evan Luard, *International Agencies: The Emerging Framework of Interdependence* (London, MacMillan, 1977), p. viii.

BOERMA AND MALAISE

Then Director-General A.H. Boerma spoke in his address to the FAO General Commemorative Conference in 1970 of the unease surrounding international organization at the twenty-fifth anniversary of the UN and FAO.¹ This malaise was partly a reflection of the times and some disquieting features on the world scene – uncertainties and conflict of purpose, growing turbulence and feeling things were getting out of control as evidenced by the spread of pollution and inflation. This malaise as it affected international organizations arose from a sense of indifference and suspicion about them. This sense was to be found both in government and in public opinion. It came both from highly conservative elements who believed they cost more than they were worth and from radical youth who believed they were not doing enough and had lost touch with the world's real needs. It focused both on the purposes and performance of these international organizations.

The founders of FAO were thinking of the needs of people, and how FAO might serve people. FAO was more than a technical agency as its motivation thus went far beyond technology. This basic motivation shared by all the organizations in the UN system had been allowed to languish with time. To the extent that it had languished, it had lost some of its credibility and its power to inspire action. It was this fading of the vision which led to the establishment of the international organizations that was really the fundamental reason for the indifference or

1. Addeke H. Boerma, with the collaboration of Colin Mackenzie, *A Right to Food: A Selection from Speeches* (Rome, FAO, 1976), pp. 128-130.

suspicion about their purpose and hence their performance. According to Boerma, FAO and the other organizations must be strengthened by renewing their original vision. This could only happen if they grew at rates which the world situation demanded. Problems and challenges were greater than in 1945. There were, however, also hopeful signs such as the Declaration the General Commemorative Conference had just adopted, the publication of the Pearson Report, and the agreement on policy for the Second Development Decade.

Three years later, Mahdi Elmandjra, former Assistant Director-General of the United Nations Educational, Scientific and Cultural Organization (UNESCO), stated in his book analysing the UN system, ‘The “image” of the system has rightly or wrongly, greatly suffered, many aspirations and hopes have been disappointed, and a feeling of uncertainty and doubt has emerged even among the staunchest defenders of its ideal.’¹ Under these conditions it was easy for an agency to be dismissed as too bureaucratic.

UN AGENCIES EXPERIENCE STRAIN

From the mid 1970s to mid 1980s the UN agencies established after World War II were experiencing severe strain which in the case of UNESCO led to the withdrawal from the organization of the United States in 1984 and Britain and Singapore in 1985. There were two main sources of strain according to Williams.² First, the agencies were not effecting the economic change the developing countries wanted in the New International Economic Order (NIEO) and were not providing them efficiently with the technical and financial resources they needed.

1. Mahdi Elmandjra, *The United Nations System: An Analysis* (London, Faber and Faber, 1973), p. 17.

2. Williams, *The Specialized Agencies and the United Nations*, p. xiii.

The second and most serious threat to the future of the UN system was the view of some Western governments that the agencies were being used for debates irrelevant to or only marginally related to their function. Particularly, Western governments felt the agencies had been used to attack their market-oriented policies as well as some of their political objectives and social philosophies.

The UN specialized agencies were by nature political. It was when they became increasingly involved in political issues irrelevant or marginal to the competence and mandate of the agency concerned that they were criticized for politicization. In this context, FAO was relatively free of politicization from 1976-1985.¹ The political debates have involved world food security, international guidelines for agricultural adjustment, problems of a more balanced growth of agricultural production, the African food crisis, plant genetic resources, and the relationship between FAO and the World Food Programme. These debates were all relevant to the work of FAO.

Williams argued that the reason FAO was not highly politicized was largely because governments were represented at FAO by delegates with a direct concern for agriculture and natural resource development. They were less likely to engage in debates over extraneous political issues than less expert representatives would be. But there are also expert delegations at other agencies such as the World Health Organization (WHO) where politicization has occurred. A more likely reason was the diplomatic skill of then Director-General Edouard Saouma in convincing Third World countries raising irrelevant political issues was not in

1. Williams, *The Specialized Agencies and the United Nations*, pp. 61-62.

author of this thesis that he considered FAO ‘too bureaucratic to achieve much’, but admitting he had undertaken no research on the organization.¹

This thesis demonstrates that the work of FAO benefited both developed and developing states, albeit particularly to the benefit of the developing world. It examines the first four decades of FAO’s history and achievements, focusing on the period 1970-85.

As White stated, to stay in business, international agencies must provide some service to governments of developed countries.² It was also relevant that UN agencies can make valuable contributions beyond the capabilities of bilateral agencies.

According to the shortcomings detailed in academic studies, UN reports, Joint Inspection Unit reports and General Assembly (GA) and Economic and Social Council (ECOSOC) debates, it was easy to form the wrong impression of UN organizations. They conveyed a picture of ‘maladministration by overstuffed, incompetent bureaucracies, paid for from inflated budgets, engaged mainly in building up their own empire; this is the picture which the press likes to paint when it takes any notice at all’.³ This was far from the entire truth when the number of dedicated people on staff were considered, Williams maintained. While all the UN agencies were bureaucracies, the bureaucratic charge was most often levelled at FAO.

1. Evan Luard, former Junior Minister, Foreign Office, United Kingdom, *Interview*, Oxford, U.K., June 4, 1983.

2. John White, *The Politics of Foreign Aid* (London, Bodley Head, 1974), p. 265.

3. Douglas Williams, *The Specialized Agencies and the United Nations: The System in Crisis* (New York, St. Martin’s Press, 1987), p. 202.

their interest or that of FAO. There were, for example, no Arab-Israeli issues raised at FAO during Saouma's Administration. A third factor might have been that the Soviet Union had until 1985 not joined FAO. Furthermore, South Africa withdrew from FAO shortly after it was excluded from FAO's work at the 1963 FAO Conference. Hence, there were no attempts at apartheid resolutions at FAO as in UN bodies where South Africa remained a member.

It was fortunate that FAO was not plagued by politicization in addition to being haunted by a bureaucratic image.

HISTORICAL PERSPECTIVE OF FAMINE

Arnold Toynbee in addressing the first World Food Congress in 1963 on the historical perspective of hunger stated:

'Yet I suppose we can guess, with some confidence, that since our ancestors first became human, most human beings have been hungry for most of the time... We may also guess that the situation in which we find ourselves today has in essence existed since the beginning. The present race between the increase of population and the increase of food supply is not something entirely new. What is new is the present sharpness of the acceleration of the pace'.¹

Toynbee saw maximum welfare, not maximum population, as the main human objective. Unwillingness on the greater part of the human race to deal rationally with the population problem was condemning mankind to continue its age-old race with hunger.

Never throughout history had there been a time when some part of the world did not experience famine. For centuries, inadequate transport and communication made starvation inevitable. Even if surplus food in other continents was known

1. Arnold J. Toynbee, 'Man and Hunger; the Perspective of History: Address to the World Food Congress, Washington, D.C., June 1963', in *FAO Studies in Food and Population* (Rome, FAO, 1976), pp. 51-52.

about, there was no way of transporting and distributing it to the starving when it was needed. Despite modern technology and communication, famine and food shortage in the twenty-first century continued. There has been a serious famine somewhere practically every year since the end of World War II.¹ Historically man had shown an inability to cope with famine, with Bihar in 1966-1967 one of the few examples (Mayer claims the only one) of the prevention of a major famine in modern history.

Mayer defined famine as ‘a severe shortage of food accompanied by a significant increase in the local and regional death rate’. He drew a distinction between chronic starvation endemic in certain areas or populations and a true famine in which people died in large numbers. The number of deaths was a good index of the severity of the famine.

According to Masefield, ‘Any satisfactory definition of famine must provide that the food shortage is either widespread or extreme if not both, and that the degree of extremity is best measured by human mortality from starvation’.² The effect of famine was sometimes best measured by the excess mortality over the normal figure.

The minimum acceptable definition implied a wide and prolonged shortage of food resulting in an increased human death rate. The definition excluded malnutrition due to inadequate diet or seasonal food shortages. It was probable,

1. Jean Mayer, ‘Management of Famine Relief’, in Philip H. Abelson, ed., *Food: Politics, Economics, Nutrition and Research* (Washington, D.C., American Association for the Advancement of Science, 1975), p. 79.

2. G.B. Masefield, *Famine: its Prevention and Relief* (London, Oxford University Press, 1963), p. 8.

although good statistics were lacking, that more people in the world died each year from malnutrition than from famine.

After a careful review of some of the major authoritative works on famine, Masefield compiled a historical list of famines, which is however not all inclusive. (See Table 1). Since modern records were better than ancient ones, famines in the last two or three centuries tend to predominate. Credibility of records also varied and evidence was frequently vague or contradictory. He concluded that the following list could be said to be authenticated by some inclusion of detail and severity.

To the above list should be added the two famines in Africa in the 1970s and 1980s. At most, one hundred thousand people died in the Sahelian drought in 1973-74.¹ A million people were estimated to have starved in Ethiopia in 1984.

With the exception of the Mexican famine in the eleventh century, there had been in historic times no famines in the American continents involving mass starvation. From time to time, food shortages had existed and continued to occur as for example in North-Eastern Brazil. A frequent occurrence in medieval times, famine in Europe declined with the development of transportation and communication. War was the cause of modern food shortages such as those in the Netherlands. In Eastern Europe, famine relief was obstructed by the lack of rail facilities. This was true even during the Russian famine of 1921-22 which occurred in the Volga basin due to the combined effects of war and drought. Some 30 million people were affected and an estimated 3 million died of

1. Helen Ware, *The Sahelian Drought: Some Thoughts on the Future*, ST/SS0/33 (New York, United Nations, 1975), p. 1.

starvation and disease. There was no record of major famines in the Middle East, or West Africa. East Africa was much more subject to food shortage and famine.

TABLE 1
Reasonably Authenticated Major Famines

DATE	AREA	NOTES
B.C. 436	Rome	Thousands of starving people threw themselves into the Tiber
A.D. 310	England	40,000 deaths
917-18	India, Kashmir	Great mortality
Cir. 1051	Mexico	Caused migration of Toltecs. Said to have originated human sacrifice
1064-72	Egypt	Failure of Nile flood for 7 years; cannibalism reported.
1069	England	Harrying by Normans. Cannibalism
1344-45	India	Many thousands of deaths.
1347	Italy	Famine followed by plague (the 'Black Death') caused great mortality
1594-98	Asia	In India great mortality, cannibalism and bodies not disposed of
1600	Russia	500,000 deaths from famine and plague.
1630	India, Deccan	30,000 deaths in Surat alone.
1660-61	India	No rain for 2 years.
1677	India, Hyderabad	Due to excessive rain. Great mortality.
1769	France	5% of the population said to have died.
1769-70	India, Bengal	10 million deaths due to drought,
1770	Eastern Europe	Famine and disease caused 168,000 deaths in Bohemia, 20,000 in Russia and Poland
1775	Cape Verde Is.	16,000 deaths
1790-92	India, Bombay and Hyderabad	Doji Bara or skull famine. Bodies not disposed of. Great mortality.
1803-04	Western India	Thousands died due to drought, locusts and war.
1837-38	N.W. India	800,000 deaths
1846-47	Ireland	2-3 million deaths due to potato blight.
1866	India, Bengal & Orissa	1 million deaths
1869	India, Rajputana	1.5 million deaths
1874-75	Asia Minor	150,000 deaths
1876-78	India	5 million deaths
1876-79	Northern China	Almost no rain for 3 years. Death estimated at 9-13 million
1891-92	Russia	Widespread distress, mortality relatively small
1899-1900	India	1 million deaths
1918-19	Uganda	4,400 deaths
1920-21	Northern China	500,000 deaths
1920-21	Russia	Millions died due to drought.
1929	China, Hunan	2 million deaths
1932-33	Russia	Due to collectivization, excess mortality estimated at 3-10 million
1943	Ruanda-Urundi	35,000-50,000 deaths
1943-44	India, Bengal	Excessive rain and war time difficulties of supply
1960-61	Congo, Kasai	Due to civil disturbance

In no other continent or countries have there been the number of famines or the magnitude of starvation that have been recorded in India and China until recent times. Indian famines during British rule were better documented than Chinese famines during the same period, or earlier Indian famines. With a few exceptions such as the famine following the Great Plague of 1345-48 in Europe, almost all recorded famines have resulted from widespread crop failures. Historically drought has been the major natural cause of famine.

In spite of rapid advances in development, agricultural technology, communications and early warnings of impending shortages, the spectre of recurrent famine continued to haunt Africa. What was less dramatic, but continued to result in as much or more death, was the chronic malnutrition of hundreds of millions who were too poor to buy or to produce food. Most people who suffered from chronic hunger resided in Asia. Eradication of hunger remained the main objective of international cooperation in food and agriculture.

Since its foundation in 1945, FAO had the responsibility in leading international efforts to cope with food shortages and famine. Sir John Boyd Orr, the first Director-General of FAO, arranged for a Special Meeting on Urgent Food Problems that resulted in an International Emergency Food Council (IEFC) to deal with post-war food shortages. The body was at first independent but financed by FAO. On January 1, 1948 it was united with FAO. As of August 1951, the Economic Aid and Social Council (ECOSOC) recommended FAO monitor countries and report food shortages or famine.

FAO was active in the 1973-75 food crisis in the Sahel due to drought. Between 1983 and 1985 at least 30 African countries had been short of food and in a few cases experiencing famine. Extreme conditions existed in Ethiopia as discussed in Chapter 2 of the thesis.

Moving food to remote areas remained a problem as did moving food to African ports and inland to areas in need. Famine would only end with development such as irrigation and infrastructure to move food in times of shortage.

THESIS STRUCTURE

In the introduction, the thesis presented information on famine, as it formed part of FAO's background. This was followed by a chapter on the history of FAO containing some of its activities. The history includes the international political climate in which FAO existed in its various phases. This climate was not discussed in other works on FAO. Other political developments involving FAO not discussed before were also included in this thesis.

The three chapters which follow, chapters 3, 4 and 5, contained a chapter on each of the three functions of FAO's Constitution (see Appendix A for complete contents); the assembling, analysis and dissemination of information; the central leadership role exercised as its forum; and provision of technical assistance mainly to developing countries. In some cases it was known that there was considerable impact of field projects as it was visible or felt. The Animal Health Institute in Cairo was the project visited several times.

Chapter 6 on the 'Overall Work of FAO' dealt with diverse topics from population and armaments to examples of achievements from markets to soils.

Chapters 7 and 8 dealt with case studies; one on fisheries and the other on animal health. The case studies provided an overview of FAO's activities in these subjects. Fisheries was the most international sector FAO dealt with while animal health also benefited industrialized as well as developing nations. When a disease broke out, FAO helped to contain it, before it spread to other parts of the world, if possible.

The final chapter, no. 9, contains the conclusion.

LITERATURE

The main source of information was the FAO itself as numerous FAO documents were referred to in the thesis. Some documents were provided to the author by FAO staff members during or after interviews. Interviews not only shed light upon the documents but provided other interesting insights. Over one hundred FAO staff members were interviewed but wished to remain anonymous because FAO was under attack by certain members of the press, therefore any information given, could be politically sensitive.

Other publications were obtained from the documents section of FAO. The libraries at FAO, Agriculture Canada and the Overseas Development Administration in the United Kingdom were used to refer to FAO publications. The FAO documents consulted most frequently in writing the thesis were the Reviews of the Regular Programme and the Reviews of the Field Programmes. Of interest were the autobiographies of three former Directors-General: Boyd-Orr,

Dodd and Sen; the Chairman of the Interim Commission to establish FAO, Pearson; and three former FAO staff members.

Oxford University libraries also contained relevant information on international organizations. Individual documents were obtained from a variety of sources. Some books were purchased by the author. A Polish thesis on FAO was not available.

Interviews cited in the thesis included those of government officials and two former Directors-General of FAO, Sen and Boerma.

CHAPTER 2

DEVELOPMENT OF INTERNATIONAL COOPERATION IN

AGRICULTURE: FAO, 1945-85

The principal primary sources relied on in the following pages were:

1. Lamartine Yates, P., *So Bold an Aim: Ten Years of International Cooperation Toward Freedom from Want*, FAO, Rome, 1955.
2. FAO, *Proposals for a World Food Board*, Washington, D.C., 1946.
3. Phillips, Ralph W., *FAO: Its Origins, Formation and Evolution, 1945-1981*, FAO, Rome, 1981.
4. De Swardt, '[Statement] Union of South Africa' in *Verbatim Records of Plenary Meetings of the FAO Conference, Eighth Session, Rome, November 1955*, FAO, Rome, 1956.
5. Boerma, Adeke H., 'Closing Address', in *Report of the General Commemorative Conference, Rome, 16 November 1970*, FAO, Rome, 1970.
6. Boerma, Adeke H., *A Right to Food: a Selection of Speeches*, FAO, Rome, 1976.
7. *FAO in 1975*, Rome, 1976.
8. FAO, *Review of Field Programmes 1980-81*, Rome, 1981.
9. FAO, *Review of Field Programmes 1984-85*, Rome, 1985.
10. *The Impact of Development Strategies on the Rural Poor: Second Analysis of Country Experiences in the Implementation of the WCARRD Programme of Action*, FAO, Rome, 1988.

INTRODUCTION

Just as national programmes for agriculture had evolved, a need developed for international organisation and programmes. Problems that had long been dealt with by governments on a national basis came to be viewed in the twentieth century as international problems more efficaciously confronted on an international basis. The international cooperation which developed in agriculture can be divided into three broad categories:

- intergovernmental programmes for technical cooperation and economic control such as surplus disposal programmes

- the collection and dissemination of information via international meetings, visits, and publications
- technical assistance to developing countries.

Although congresses had been held on technical matters since before the beginning of that century in Europe, the first two international organisations dealing with agriculture originated largely as a reaction to the severe depression in the 1880s and 1890s. The key dates are 1889, when private individuals formed the International Commission of Agriculture, and 1905, when the first intergovernmental organization, the International Institute of Agriculture (IIA), was founded on the initiative of David Lubin, a U.S. former farmer and businessman.

The IIA was concerned primarily with the organization of meetings, gathering of statistics and production of publications, laying the basis for FAO's work in those areas and conducting the first World Census of Agriculture in 1930. During the Second World War, it provided protection for those associated with it, foreigners and Italians from the Nazi occupation of Rome.¹ Since the 40 members were predominantly European countries, activities were concentrated on European interests. There was no assistance to developing countries, for few were independent and the more developed countries 'saw and felt no obligation toward aiding the weaker ones'.²

1. IIA, *The Work of the International Institute of Agriculture During the War 1940-1945* (Rome, 1945), p. 35.

2. P. Lamartine Yates, *So Bold an Aim: Ten Years of International Cooperation toward Freedom from Want* (Rome, FAO, 1955), p. 31.

Toynbee has stated that he did not believe that governments of the world would have been capable of calling anything like FAO into existence before 1914.¹ The idea would hardly have occurred to them, and would have been regarded as a covert attack on national sovereignty.

The concern of the International Labour Organization (ILO) with hired and plantation labour was one of the first examples of assistance to developing countries. The ILO set up a section to deal with agricultural labour, but there were no discussions in any fora of the effects of agricultural policies on international trade despite the fact that disequilibrium in international trade contributed to the economic crisis following World War I. The League of Nations left agricultural issues to the IIA. It had an important Economic Section under a British economist, Loveday.

Two other developments were to decisively influence evolution of international cooperation in agriculture. During the 1920s and 1930s in Europe, Australia, and the United States, emergence of welfare thinking nationally, resulted in consideration of economic aid to poorer nations internationally, primarily Italy, Germany, and Japan. As Tucker points out, however:

‘In the interwar period, what is increasingly taken as commonplace today, that the division between the rich and the poor nations poses a grave danger to peace and stability, was then no more than the musing of a few seers’.²

The conviction that justice requires the rich nations to help all peoples obtain a ‘minimum subsistence’ could not become a policy of nations that had yet to

1. Arnold J. Toynbee, ‘Man and Hunger; the Perspective of History: Address to the World Food Congress, Washington, D.C., June 1963’, in *FAO Studies in Food and Population* (Rome, FAO, 1976), p. 63

2. Robert Tucker, *The Inequality of Nations* (London, Martin Robertson, 1977), p. 26.

recognise the concept for their domestic populations, but it emerged after the Second World War, notably in the policy of technical assistance.

Secondly, the correlation between health and nutrition was scientifically established. In 1935, findings by Dr. Burnet and Dr. Aykroyd were published in a League of Nations Health Section report entitled *Nutrition and Public Health*.¹ In the United Kingdom, Sir John Boyd Orr concluded that two-thirds of the British people were malnourished.²

The World Depression of 1931 diminished agricultural markets and Frank L. McDougall, Economic Adviser to the Australian High Commissioner in London, realised that improved nutrition for national populations would lead to wider markets for agricultural products. In 1935, in his memorandum on *The Agricultural and Health Problems*, McDougall argued that it would be a bankruptcy of statesmanship if it should prove impossible to bring together the great need for nutritious food and the immense potential production of modern agriculture. Stanley Bruce, Australian High Commissioner in London, on 11 September 1935 addressed the League of Nations proposing ‘a marriage of health and agriculture’. He advocated a vigorous revival of trade between the industrial and agricultural countries making possible improved nutrition for national populations. In a favourable response, the Council of the League set up a Mixed Committee on the Problem of Nutrition chaired by Lord Astor. Its report, *The Relation of Nutrition to Health, Agriculture and Economic Policy*, dealt almost

1. Wallace Aykroyd and Etienne Burnet, *Nutrition and Public Health* (Geneva, League of Nations, 1935)

2. John Boyd Orr, *Food, Health and Income Survey*

completely with nutrition in advanced countries. It resulted in 20 governments establishing national nutrition committees but had little effect in moving agricultural surpluses into consumption. That came with the recovery of consumer purchasing power and preparations for war production.

Before the war began, the National Committee held international conferences in Geneva in 1937 and 1938, and in Latin America in 1939, but plans for regional meetings in the Far East and Africa were abandoned because of the war. The outbreak of the war suspended most activities of the League of Nations but its work in food and agriculture not only survived but was part of the impetus that led to the founding of FAO in 1945.

Countries at war took measures to increase production in order to feed their armies and civilian populations. In the United States the strong demand for food at favourable prices resulted in adoption of advanced farming techniques and a large increase in agricultural production.

In 1940, President Roosevelt's 'Four Freedoms' speech outlining the Allies' war aims included freedom from want. He regarded as a perfectly attainable target through modernisation of agriculture, the provision of enough food for all people in all lands. Due to wartime shortages, emphasis had shifted from surplus disposal to increased food production and malnutrition. Freedom from want was underwritten in the Atlantic Charter (1943). In England, its aims were realised with the publication in December 1942 of the Beveridge Report on Social

Insurance and Allied Services, a report that was also to have considerable influence abroad.¹

THE FOUNDING OF FAO

Meanwhile, in October 1942, McDougall suggested to President Roosevelt in Washington that food was one of the common problems on which nations which had banded together to win the War, could continue to cooperate. The President reacted by inviting Allied governments to participate in an International Conference on Food and Agriculture, in Hot Springs, Virginia. The United Nations Conference on Food and Agriculture, held between 18 May and 3 June 1943, was attended by 43 countries. Although Asia was sparsely represented and colonial Africa hardly at all, the Conference focused attention on the malnourished in these regions. Concern regarding the eradication of hunger has increased ever since. The Americans believed their agricultural revolution at home could be realized all over the world with the help of an intergovernmental agency to spread the appropriate techniques. The population explosion that was to deter this achievement was then not yet foreseen. The entire Conference was dominated by the idea of freedom from want with regard to food and agriculture.

Lester Pearson captured the unusual atmosphere of this first UN Conference on Food and Agriculture by describing the inaugural session as an attempt by the Chairman to combine the Congress of Vienna with a Rotary Club meeting.² It was

1. A.D.K. Owen, From Poor Law to Beveridge Report, *Foreign Affairs*, July 1943.

2. Lester Pearson, *Mike: The Memoirs of the Right Honourable Lester B. Pearson* (Toronto, University of Toronto Press, 1973), pp. 247-248.

opened with a silent prayer, without anyone quite sure as to what to pray about. It was closed with the American national anthem, the 'Star Spangled Banner' of which none of the foreigners knew the words, rather than any tribute to the United Nations. While the Americans initiated the Conference, the British played the leading role at the gathering.

Nutrition was the main theme of the Conference discussions, reflected in the fact that all but one of the first ten resolutions dealt with various aspects of nutrition policy. The thirty-one resolutions were addressed primarily to governments and action they should take to increase production and improve nutrition. Most of the fundamental ideas have remained the same to this day, while technology has radically changed. It was emphasized that poverty is the first cause of malnutrition and hunger. It was recognized already then that distribution could only be improved with increased employment in all countries.

Most of the ideas comprising food security today were mentioned at Hot Springs. It could be argued that these ideas are the solution and that governments simply have not acted sufficiently. The Conference agreed that a permanent organization to enable countries to collaborate should be established, but did not elaborate the details. It recommended the establishment of an Interim Commission to draw up a detailed plan regarding the functions and structure of the organization with Lester Pearson of Canada as its Chairman. As a result, he was also requested to preside over the first Conference of the new Food and Agriculture Organization held in Quebec, Canada from 16 October to 1 November, 1945. These discussions were held at Quebec independently from the

deliberations at San Francisco to create the United Nations, in order to keep food out of politics as far as possible.¹ There were few subjects, however technical, that did not have political implications. Pearson pointed out this was especially true at Quebec in negotiations with the USSR.² The Soviet Union was a member of the Interim Commission, and an observer at Quebec, but in 1985 still had not joined FAO.

FAO became the first of an entire series of new United Nations organizations on 16 October 1945 just before the United Nations Charter came into force, eight days later, on 24 October 1945. Thirty-nine nations adhered to the Constitution during the Conference and three had signed the Constitution ad referendum. The membership rose to a total of 156 countries in 1985.

The Chairman of the First Session of the FAO Conference, Lester B. Pearson, in introducing the Conference Report, stated:

‘The first of the new, permanent United Nations Agencies is now launched. There are few precedents for it to follow; it is something new in international history. There have been functional international agencies with more circumscribed objectives and tasks, but FAO is the first which sets out with so bold an aim as that of helping nations to achieve freedom from want. Never before have the nations got together for such a purpose’.³

FAO, he said, would bring the findings of science to the workers in food and agriculture, forestry and fisheries everywhere; and securing improvements in the efficiency of the production and distribution of all food and agricultural products, would better the condition of rural populations, thus contributing toward and expanding the world economy.

1. B.R. Sen, *Towards a Newer World* (Dublin, Tycooly International Publishing, 1982), p. 132.

2. Pearson, *Mike*, p. 249.

3. Lester B. Pearson cited in Lamartine Yates, *So Bold An Aim*, p. 53.

The Constitution adopted spells out the main functions of the organization, which have remained the same. There were to be three organs of FAO: a Conference, an Executive Committee and a staff headed by a Director-General. The self-appointed Executive Committee was replaced in 1947 by a Council of government representatives appointed by the Conference, and working under the leadership of an Independent Chairman.

FIRST PHASE: 1946-1950 – WASHINGTON YEARS

The post-war political environment was dominated by the Western bloc, led by the United States as it had emerged as the world's foremost economic power after the War. The Western bloc was united in NATO and allied with the Latin American states. The fascist bloc had been eliminated from the international system and the enlarged communist bloc emerged as the major force opposing Western interests. While during the war, Argentina was not invited to the Hot Springs Conference because of its relations with the Axis powers,¹ after the war Argentina's adherence to the International Emergency Food Council and the FAO was regarded by the United States as a contribution to the struggle against communism. The developing nations, such as India, Indonesia, Burma, Egypt, and other Arab states, had recently gained independence and were deliberately pursuing a policy of non-alignment.

The development of military capability had to compete with welfare demands for resources everywhere. In general, except at times in the United States and

1. *Foreign Relations of the U.S.* (Washington, D.C., U.S.G.P.O., 1963), vol. 1, 1943, pp. 829-830.

USSR, as they emerged as nuclear powers, welfare considerations gained precedence over the acquisition of military might.

The Cold War became linked to foreign aid and ideological intervention in the sense that Western aid had its origins in the United States' fear of Soviet communism and of European imperialism. In 1947, the Marshall Plan directed to the reconstruction of Europe and Japan followed the earlier message to Congress by President Truman on 12 March 1947 in which he saw the whole world threatened by communism. This declaration of the Cold War became known as the Truman Doctrine. The Marshall Plan was partly seen as a defence against Soviet aggression. It was to put the European economies on a better footing so they could prevent discontent and provide for their own defence.

Fortunately, since Russia did not become a member, FAO never became a battleground for East-West politics, as for example UNESCO where Russia was a member. It was generally believed that the USSR refrained from joining FAO for fear of exposing its agricultural backwardness. But significant amounts of roubles came to FAO through the UN for use in technical assistance. To spend these funds, seminars were organized in the USSR in areas of agriculture in which it was advanced, such as dry land farming and irrigation.¹ Other forms of cooperation and publications containing Soviet agricultural information were closely monitored by FAO.

Technical assistance was also viewed by Western governments as a means of deterring the spread of communism to the developing countries. Western policies

1. John Abbott, *Politics and Poverty: a Critique of the Food and Agriculture Organization of the United Nations* (London, Routledge, 1992), p. 18.

of collective security, economic aid and technical assistance were hence partly channelled through the United Nations. Developing countries such as India and Indonesia began to demand programmes of assistance from the United Nations. In 1948 the first small technical assistance programme was financed from the regular United Nations budget but the industrialized nations opposed the funding of technical assistance from the regular budget to which their contributions were compulsory. This signalled opposition by those donors who wanted voluntary contributions to those who wanted compulsory contributions.¹

On 20 January 1949, in his Inaugural Address, President Truman announced his Point Four Program calling for increased technical assistance to underdeveloped nations. The U.S. Ambassador to the United Nations, Warren Austin, proposed a resolution on technical assistance by the United Nations, which was adopted and with minor modification became the resulting plan, formulated in June 1950 by the UN Technical Assistance Conference in New York. Contributions made under the new Expanded Technical Assistance Programme (ETAP) began in 1950 and were voluntary.

It was in this political environment that the initial development of FAO occurred. When Lester Pearson declined nomination, Sir John Boyd Orr, with some reluctance, accepted the offer at Quebec to become the first Director-General of FAO. He resolved to get the organization started on the right foot. Although he was attached to the British delegation as an observer at Quebec, he was nevertheless asked to speak at the request of delegates. Orr argued that the

1. Evan Luard, *The United Nations: How it works and What it Does* (London, Macmillan Press, 1979), p.57.

Hot Springs Conference had made no great contribution to a world food policy. When the hungry people of the world wanted bread they were to be given statistics.¹ He urged the Conference to obtain funds and authority to increase production and distribution of some of the main foodstuffs. As well as being an eminent scientist, he was concerned with the economic and financial problems which had to be solved if adequate nutrition for all was to become a reality.

When after the war, a food shortage did occur, Orr's response as Director-General of FAO was to organize the Special Meeting on Urgent Food Problems, in Washington in May 1946. That meeting asked FAO to prepare proposals for dealing with food problems. At the same time, the Combined Food Board consisting of the United States, the United Kingdom and Canada was enlarged to include all the countries having a significant interest in the commodities being allocated. This new body, the International Emergency Food Council, began operations in July 1946. For two years it surveyed commodities in short supply and recommended allocations for countries from available exports. Its secretariat though financed by FAO was independent, in order to free FAO from short-term tasks, and allow it to concentrate on long-term issues of nutrition, production and national distribution. This categorization was partly attributable to the consideration being given at this time to the International Trade Organisation.

As supplies improved, the difference between short and long-term tasks became blurred. On 1 January 1948, the IEFC was dissolved and the Central Committee became the "International Emergency Food Committee" of the FAO Council, while the secretariat became the Distribution Division of FAO.

1. John Boyd Orr, *As I Recall* (London, MacGibbon and Kee, 1966), p.162.

The FAO Council had been established as a result of the Proposals the Director-General had been asked to formulate in response to long-term problems at the 1946 Washington meeting. The Second Session of the FAO Conference at Copenhagen considered the Director-General's Proposals for a World Food Board. The functions of the World Food Board would be¹

1. to stabilize prices of agricultural commodities, including the provision of the necessary funds
2. to establish a world food reserve in the event of crop failure
3. to provide funds for disposal of surpluses to needy countries on concessional terms
4. to cooperate with other organizations concerned with trade and financing of development.

The basic problem was seen as one of people being too poor to be able to purchase sufficient food for their needs.

The Conference, in a devious manoeuvre to sidetrack Orr's plan, created a Preparatory Commission chaired by Stanley Bruce to examine the proposals with a view as to how agricultural prices might be stabilized and the food needs of people in all countries be met. Governments had their own economic difficulties and were not prepared to hand over the authority they considered to be national sovereignty or the massive international sums of money necessary for an international organization to support buffer stocks, famine reserves, and surplus disposal.

1. FAO, *Proposals For a World Food Board* (Washington D.C., 1946), pp.11-12.

The Preparatory Commission on World Food Proposals produced a number of conclusions and recommendations expressing the need for broad industrial and agricultural development supported by finance from an International Bank. Price stabilization should be sought through intergovernmental commodity agreements while exporting countries should arrange concessionary sales of surplus food for nutrition programmes in importing countries. The annual session of the FAO Conference was to hold a review and consultation as to production and nutrition programmes. This proposal was adopted and as a result a programme review has been prepared for all succeeding conferences and publication of *The State of Food and Agriculture* to service Council and Conference meetings was begun.

A further recommendation was that a Council of FAO or World Food Council was to be set up to act between sessions of the Conference. As a result, a Council comprised of 18 governments in place of the then existing Executive Committee composed of outstanding individuals was set up at the third session of the FAO Conference. The proposals for a World Food Board among other matters had caused a degree of unease among governments regarding FAO affairs being left to people serving in their personal capacities between Conferences.¹ At the same Geneva Conference in 1947 the IEFC was dissolved and became an integral part of FAO and the Council.

Sir John was deeply disappointed over the rejection of his World Food Board but agreed to serve until a successor could be found. His autobiography contains

1. Ralph W. Phillips, *FAO: Its Origins, Formation and Evolution 1945-1981* (Rome, FAO, 1981), p. 23.

musings as to how, if different governments had been in power in the United States and the United Kingdom, his scheme would have been realized.

Haas argued that Orr's timing was wrong.¹ He stated that food-exporting countries might have accepted an international commodity policy, as some of them actually practised these policies nationally, if the scheme had been presented when world demand and prices were low. Haas goes on to refer to the breakdown of the "illusory world consensus" that fashioned the UN system between 1944 and 1946. While FAO failed in its attempt to control the world's agricultural commodities, the IMF was unable to ensure international exchange stability and UNESCO failed to fashion an internationally acceptable programme for education. Through all the agencies were too political to remain unaffected by their political environment, they were sufficiently technical to survive. WHO, the most technical of the specialized agencies, actually flourished.

Sir John was regarded as a man with little political acumen, but he was a strong idealist who made a substantial contribution in the initial organization of FAO's work and structure.

The next Director-General of FAO, Norris E. Dodd, who succeeded Orr in 1948, revived the World Food Board idea in a modified form with the International Commodity Clearing House. Its function was, first, to move more food from surplus to deficit countries by accumulating payment in convertible currencies to the credit of the selling countries until convertibility was to be restored. Secondly, it was to arrange concessional sales of remaining surpluses

1. Ernst B. Haas, *Beyond the Nation-State: Functionalism and International Organisation* (Stanford, Calif., Stanford University Press, 1964), pp.122 and 438.

and finally it was to hold and operate buffer stocks. The ICCH was as soundly rejected by the 1949 FAO Conference as Orr's proposals. In its place, the Conference established a Committee on Commodity Problems (CCP) which continues to function.

Norris Dodd, the former U.S. Under-Secretary of Agriculture, was a tough administrator who had himself farmed and managed private business interests, and carried on and expanded FAO programmes. It was during these early days that FAO's methods of work were developed.

Attitudes of government had changed considerably since President Cappelli complained in his letter to Lubin regarding the International Institute of Agriculture:

'At its foundation, the Institute met with little sympathy from the Governments: they only accepted the idea to please the King of Italy and they tried to limit its work. They did not allow it to occupy itself with cattle diseases, which do more harm than anything else and at first they forbade the publication of anything that did not come from the Governments, while what the Governments communicated was of very little value.'¹

In 1945, other than in the area of international commodity policy, member governments of FAO were ready to communicate information and cooperate in other ways in order to improve the nutritional levels of people everywhere. Questions regarding the quality of statistics and other information received from governments remained open to question to this day in spite of improvement over time. One of the first important FAO international fields was control of epizootic diseases, despite the fact that some governments (as discussed in Chapter 7)

1. Letter from Capelli to Lubin cited in Asher Hobson, *The International Institute of Agriculture* (Berkeley, Calif., University of California Press, 1931), p.125.

continued to withhold or provide misleading information with regard to animal disease.

There was no consensus at Quebec as to what the role of FAO should be.¹ While some participants wanted to see simply an enlarged IIA for gathering, analysing and publishing information, others also wanted to see an agency with legislative powers, including the ability to regulate international trade. Sir John's election was favourable to the latter, but he was soon defeated.

The presumption at Quebec that FAO would follow procedures established by the IIA and gain from its experiences proved not to be the case.² The Anglo-American staff in Washington tried to develop their own methods of collecting and publishing statistics, wasting time and repeating mistakes. It took a long time for FAO to attain IIA standards in the collection and publishing of statistical, technical and economic information which continue to be major functions of FAO. The first World Census of Agriculture was prepared in 1950, from which arose an index of world agricultural production.

During its first five years in Washington, from 1945-1950, most of the fundamental activities of the organization were developed. International and regional meetings on a variety of subjects were held; survey missions were sent to study agricultural problems and propose development programmes; statutory bodies, of which the International Rice Commission was the first, were organized to facilitate co-operative activities among governments; and direct contacts were maintained with agricultural leaders in member countries. Scholarships and

1. Lamartine Yates, *So Bold An Aim*, p. 55-56.

2. Lamartine Yates, *So Bold An Aim*, pp. 98 and 106.

fellowships were awarded to nationals to study in foreign countries in order to provide continuing leadership for FAO projects in their countries. Limited amounts of equipment, technical supplies and literature such as rinderpest vaccine and the publication *Rinderpest Vaccines and Zebu Cattle of India and Pakistan* were supplied.

At this time, technical assistance was also beginning. Both the Hot Springs conference and the Interim Commission had emphasized technical cooperation. FAO also assumed responsibility and the funding for the agricultural advisory projects of the United Nations Relief and Rehabilitation Administration (UNRRA). In February 1947, FAO took over UNRRA's agricultural funds and programmes located in European countries plus China, the Philippines and Ethiopia. During this early period, FAO undertook a number of technical missions but its funding was too limited for extensive fieldwork.

SECOND PHASE: 1951-1956 – EMERGING COUNTRIES

In the 1950s, newly independent countries from Africa and Asia joined the international system, pursuing together with many Latin American countries the doctrine of non-alignment. The Western and Eastern blocs continued to exist, but relations between the blocs became more relaxed. The USA and USSR responded to the interests of developing countries by the provision of assistance and supporting the anti-colonial struggle in return for military bases and other security arrangements.

The “Point Four” proposals led to increased bilateral aid by the United States, especially to Third World countries near the Communist bloc. By the mid-1950s, Greece, Turkey, Burma, South Vietnam, Taiwan and South Korea were receiving most of United States’ aid, demonstrating a shift of American aid from Western Europe to southern Europe and Asia, as the Korean War and the Communist Revolution in China appeared to justify. Furthermore, Britain and France had lost influence. Aid had become an increasingly important factor in foreign policy. The western countries showed particular zeal to aid countries, which appeared to be still uncommitted between the two leading political philosophies. Imperial powers also provided aid to avert revolt in their colonies.

The major programmes were those of France and Britain and to a lesser extent, the Netherlands, Belgium and Portugal to colonies and ex-colonies. European aid programmes grew and diversified under pressure from the United States, which regarded aid to the Third World as a benefit to all Western allies,¹ in the sense that political stability there, the containment of communism and greater economic prosperity were in their interest. The United States, therefore, insisted that the burden of providing aid to the Third World should be shared. The colonial powers were attempting to maintain influence in their colonies that had gained independence by providing bilateral aid. Until 1969, it was the policy of the United States and Canada not to assist nations to increase food crops such as wheat and rice, which might compete with their own surpluses, although countries could obtain assistance from FAO. A change of assistance occurred after the

1. David Wall, *The Charity of Nations: The Political Economy of Foreign Aid* (London, Macmillan Press, 1973), p.10.

major drought in India in the mid-1960s would have caused more starvation if it had not been for the emergency food aid from the United States and elsewhere.

With the influx of newly independent countries into the UN system, the demand for technical assistance and capital for development increased. ETAP was confined to the provision of experts and fellowships plus small allocations of equipment for demonstration projects. The developing countries argued that they needed capital on 'soft credit' to develop. Such capital was not available from either bilateral sources or the World Bank and there was concern regarding the developing countries' ability to service their debts.

Throughout the 1950s, the developing countries therefore urged the establishment of an international capital development organization. In 1953, a Committee of Nine produced a concrete proposal recommending the establishment of a United Nations Fund for Economic Development. The attitude of most of the Western countries was that until a system of international supervised disarmament took place, they could not afford to support the proposed fund. Although it never materialized, the Western countries were pressurized into a compromise in the form of the Special Fund created in 1958. Contributions to the Special Fund were to be voluntary. It was not to provide capital but to concentrate on "pre-investment" surveys that would encourage investment funds from other sources. Like ETAP, it provided experts and fellowships, but bigger amounts of equipment were given for larger projects and for longer periods of time.

In June 1950, the United Nations convened a Technical Assistance Conference at which 50 governments pledged approximately 20 million dollars for technical assistance, of which the U.S. contribution was 60 percent. FAO received 29 percent of the first U.S. \$10 million granted. This marked the beginning of the ETAP. While it was mainly in its national interest, the degree to which the United States supported the UN in its early days should be recognized. In 1951, the United States Point Four contribution to FAO was practically as much as the entire FAO's regular budget.¹ FAO's membership in 1951 totalled 68 nations.

During the Emerging Countries phase from 1951-1956, increased funding made expansion of FAO field activities possible. Between 1950 and 1955, FAO received from ETAP additional financial resources approximately equal to its regular budget.

By the end of 1951, FAO had recruited 322 experts and was servicing 56 countries or territories. In 1956, FAO received nearly U.S. \$8 million from ETAP funds for activities in all its major fields of work. At the end of 1956, FAO had 467 experts in 58 countries or territories for projects in such areas as animal improvement, control of pests and diseases, land and water use, forestry and fisheries development and improvement of agricultural statistical services and agricultural marketing. ETAP funding also provided for training in various forms such as seminars, training centres and fellowships.

It was during this period that the cooperation with other UN agencies both within technical assistance and in the Regular Programme developed. Cooperation

1. *Foreign Relations of the U.S.* (Washington, D.C., U.S.G.P.O., 1976), V. II, pp.103-104.

began with WHO and the United Nations Children's Fund (UNICEF) in such areas as nutrition. This time marked the beginning of financial cooperation with UNICEF, as it funded FAO experts to run milk processing and pasteurizing plants. In 1952, UNICEF had been transformed from a relief agency into an organization to provide assistance to children, especially in developing countries.

During this second phase, the developing countries began to exert political pressure on FAO. It was in 1955 that the developing countries united to keep the United Kingdom from being re-elected to the Council despite its outstanding contribution to FAO.¹ At the same session, the level of the budget was 'steamrolled' through by a vote of 24 to 23. The delegate from South Africa referred to the 'new mood' which had come into FAO and hoped it would end here.²

This development was not peculiar to FAO. By the mid-1950s with the increase in membership by newly independent countries in the UN system, the voting strength of groups changed and emphasis began to shift towards the needs of developing countries. It was, furthermore, in 1956 that the U.K. put forward B.R. Sen of India as a candidate for Director-General of FAO, considering that a United States national had held the top post long enough. Sen became the first head of a UN agency from a developing country.

In 1951, FAO headquarters was moved to Rome from Washington. Denmark, Switzerland and the United States had also offered to be the seat of the organization. Under its initial statutes, FAO was to be located at the site of the

1. Frank Shefrin, *Interview*, Ottawa, Canada, July 27, 1983.

2. De Swardt, [Statement] in *Verbatim Records of Plenary Meetings of the FAO Conference, Eighth Session, Rome, November 1955* (Rome, 1956), pp.115-116.

permanent headquarters of the UN, but when the headquarters was located in New York, that city was regarded as an inappropriate location for an agricultural agency. Even so, the U.S. government, including Director-General Dodd, argued for FAO to remain in the United States.

FAO developed in a somewhat different manner than it would have, had it remained in Washington under greater American influence. Though the agency would have benefited from American research and technological innovation, there would probably also have been negative political and other implications. It has been considered that international organizations would be more international in character if located in small, neutral countries. While Italy was neither small nor neutral, it was not one of the major powers either and, immediately after the war, it was relatively weak compared to the United States. Rome was geographically more central and closer to the developing countries that would in the future require most of the assistance.

At this time, FAO membership totalled 68 nations and Dodd remained Director-General until Philip V. Cordon, another U.S. citizen whose background had been agricultural research, succeeded him in 1954. But he proved unable to cope with managing an international organization and resigned on grounds of ill health in 1956. Binay Ranjan Sen of India was elected to succeed him at the Third Special Session of the FAO Conference held in September 1956, assuming office later that year.

While technical assistance turned out to be the main development, there were three other salient accomplishments. The Second World Food Survey was brought

out in 1952, demonstrating that five years after the Second World War, the average calorie supply per person remained below pre-war levels; the André Mayer research fellowships were established; and the International Plant Protection Convention was approved in 1951.

In 1953, the FAO Conference recommended that governments shift their agricultural policies away from general expansion of food production that characterized the post war years and instead move toward the selective expansion of products needed to improve nutrition.

After studying the problem of establishing an International Emergency Food Reserve for two years, the FAO Conference in 1953 decided that such a reserve should not be established as no government in a position to contribute substantially was prepared to do so.¹ However, the problem of world food reserves continued to be debated in both FAO and General Assembly fora. In response to requests from the General Assembly, FAO prepared a comprehensive report on *National Food Reserve Policies in Underdeveloped Countries*, which analyzed the desirability of promoting the use of surplus foodstuffs in building up national food reserves to be used in accordance with established principles to meet emergencies and facilitate economic development. Studies were undertaken in Egypt, Spain and India to see how U.S. and other surpluses could be utilized to promote economic development.

The FAO Committee on Commodity Problems developed principles for the disposal of agricultural surpluses in 1954: reviewed by government in 1955, they

1. *U.S. Participation in the UN: Report by the President to the Congress for the Year 1953* (Washington, D.C., U.S.G.P.O., 1954), p.115.

were found generally acceptable as international guidelines and the working party, which formulated them, became the standing Consultative Sub-Committee on Surplus Disposal of the FAO Committee on Commodity Problems. It continued to consider the international aspects of surplus disposal, participating countries obtaining information on each other's disposal programmes and policies and bringing to the group's attention any adverse effects countries' activities might have on international trade.

THIRD PHASE: 1956-1967 – B.R. SEN'S TRANSFORMATION OF FAO FROM A TECHNICAL TO A DEVELOPMENT AGENCY

The international environment during the decade was, to a degree, an extension of the trends of the 1950s, partly due to the continuance of the Cold War until 1968. Political tension relaxed that year with signature of the Nuclear Non-Proliferation Treaty. Negotiations between the USSR and the United States over the limitation of strategic forces were about to start and the trauma of Vietnam had put the American policy of containment into question.¹

With the influx of more member states, the UN was less under American domination, although the United States usually succeeded in having its preferences endorsed by the necessary majorities. During this phase, most of the remaining colonies in Africa gained independence, and formed the Organization of African Unity.

As more developing countries became members of the UN and its specialized agencies, their needs assumed enhanced importance and the emphasis given to

1. Stanley Hoffman, *Primacy or World Order: American Foreign Policy since the Cold War* (New York, McGraw-Hill), p.9

social and economic development increased. Further mechanisms were established to cope with their problems, including the World Food Programme (WFP), discussed below in this chapter, in 1961.

The Havana Charter, which had been negotiated at the 1948 Conference for International Trade and Employment, was never ratified and the agency which it generated was designated the Interim Committee for the International Trade Organization. It was perceived as a counterweight to GATT, biased in favour of rich countries. The first United Nations Conference on Trade and Development (UNCTAD) was convened in 1964, becoming an organization with its secretariat in Geneva. In 1967, responsibilities for industry were transferred from the UN Department of Economic and Social Affairs to the United Nations Industrial Development Organization (UNIDO), then an organ of the General Assembly. In 1979, a constitution was adopted to transform UNIDO into a specialized agency. In another major development, the Special Fund and ETAP were consolidated to form the United Nations Development Programme (UNDP) on 22 November 1965.

During the 1960s, a new era of high-yielding seeds, known as the Green Revolution, began, renewing optimism on the potential to end world hunger. The context was that science and technology could obtain almost unlimited goals.

There was also evidence during this period of emerging political strength of developing countries and division between developed and developing countries. Thus, the newly independent African countries attempted to have South Africa expelled at the Twelfth Session of the FAO Conference in 1963 and Ghana

proposed an amendment to the FAO Constitution to provide for the expulsion of member countries. This resolution was also in part directed at Portuguese territories in Africa. The final resolution noted that the arrangement should not allow South Africa to transfer to other regions but did not involve either its expulsion or suspension from the Organization; South Africa withdrew from FAO shortly after this Conference. It was the first Conference at which international political issues overshadowed agricultural, economic and technical issues and this debate occupied one-third of the total Conference time.¹

B.R. Sen in his public statements and programmes of work had stressed FAO's role in the service of developing countries and sentiment was growing among developing countries that the Organization existed only for their benefit and that they should hence determine its programme and budget. At first, the developed countries played down this approach but by 1967, the United States, among others, emphasized FAO's priority for fieldwork in less developed countries.

By 1967 a further trend had developed in the polarizing of developed and developing countries² in terms of sentiment, positions and voting. Such polarization has continued but is less pronounced at FAO than in some other international organizations such as UNCTAD, the ILO and UNESCO, which are more political organizations.

1. *Official Report of the United States Delegation to the Twelfth Session of the FAO Conference, Rome, Italy, 31 October – 5 December, 1963*, p. 79.

2. *Official Report of the United States Delegation to the Fourteenth Session of the FAO Conference, Rome, Italy, 23 October – 23 November, 1967*, p. 114.

It was in this third phase under the leadership of B.R. Sen that FAO was transformed from being primarily a technical UN organization into a development agency. Those who worked closely with him describe him as an idealist and a man of kindness and vision. As the first head of a UN agency from a developing country, he was especially sensitive to the needs of the newly-independent countries and said that it had been his life's dream to see the end of degrading poverty and equal opportunity for all.¹ Sen was impatient to see progress in efforts to end hunger; he was strong and independent by nature. He is generally regarded as having been one of the most outstanding heads of any UN agency. Sen told the writer on several occasions that it was easier in his day to run an agency than it later became,² for member countries were eager to cooperate and provide aid, particularly multilateral. He said he did what he believed to be best for the functioning of FAO, ignoring the opinions of governments unless he thought they were right. Sen had been an administrator in the Indian Civil Service, becoming Director-General of Food for all India, before representing his country as Ambassador to Italy, Yugoslavia, the United States, Mexico and Japan.

Sen's major contribution was probably his political leadership in transforming FAO from a technical data-gathering agency into one of the world's most important development agencies.³ This was facilitated by additional financial resources provided by the Special Fund, the World Bank and regional banks. He assumed his post as Director-General with a plan for a world campaign against hunger. Realising that the complex problem of hunger could not be effectively

1. Sen, *Towards a Newer World*, p. 137.

2. Sen, *Interview*, Rome, April 29, 1983.

3. Ross B. Talbot, *Sen's Extraordinary Career*, Food Policy, May 1983, p. 162.

dealt with either by developing nations or by FAO alone, he promoted an awareness worldwide regarding the hunger problem that would lay the foundation for action. Sen explained that the population of developing countries simply accepted hunger because it had always been there¹ and that the magnitude of the problem would not be properly understood until world food surveys were undertaken. He first mentioned the idea of the Freedom from Hunger Campaign (FFHC) in a speech to ECOSOC in July 1958, and formally launched the campaign on 1 July 1960.

The campaign had three main objectives: information and education; research and action to develop specific projects; and increasing the purchasing power of needy groups. It obtained the support of member governments, non-governmental groups and the general public. The first World Food Congress was conceived as part of the five-year campaign and timed to fall at its midpoint, coinciding with the twentieth anniversary of the Conference convened at Hot Springs, Virginia by President Roosevelt in 1943.

The main purpose of the World Food Congress was to bring together all those engaged in Campaign activities to review current programmes and to formulate plans and policies for future action. In the past, donor and recipient countries had little opportunity to meet on a common platform. Participants were invited in their personal capacities, not as members of government delegations, and prior national conferences provided an international input.

1. B.R. Sen, *Interview*, Rome, April 30 1983.

The essence of the Congress was why food production was not increasing and what should be done about it. The technical aspects as to how production could be increased had been dealt with at the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas, held in Geneva, in February 1963, a meeting designed to complement the Food Congress. The new dimensions of the problem were viewed as being primarily demographic. No plan of action was produced but the Food Congress adopted a Resolution recommending the holding of a World Food Congress periodically to review the world food situation in relation to population and overall development. The most significant recommendation was that FAO should prepare a plan for action: the Indicative World Plan for Agricultural Development.

The FFHC had made it imperative to reappraise the hunger situation, especially in the light of population growth. In 1963, the Third World Food survey was published. While there had been an improvement of nutrition in developed countries, the survey concluded that between one third and one half of the current world population suffered from malnutrition.

By this time, the unprecedented, and largely unforeseen, population explosion in the developing countries had become obvious, and it was realized that population growth in the developing countries was likely to accelerate. By 1950, the developing countries of Asia, Africa and Latin America had changed from net exporters to importers of cereals. Unlike his predecessors, Sen decided not only to increase awareness regarding the dangers inherent in food production failing to

keep pace with population growth but used his position to promote population control.¹ He managed to take a brave stand without antagonizing the Catholic Church. Such factors as Sen's warnings and the averted Indian famine of 1965-66 were probably instrumental in the United States' government recognizing the need for population control. (See Chapter 6).

In 1960, the UN General Assembly adopted a resolution on the use of food surpluses to alleviate hunger. FAO was asked to draft the procedures that resulted in the creation of the World Food Programme (WFP). The earlier plans for a multilateral agency to provide food aid, such as the World Food Board and the ICCH, included broader policy objectives and were therefore rejected. There were, however, also other factors such as a United States objection to multilateral food aid, when they were giving most of it.²

WFP is the major multilateral food aid agency. It was created as a response to the nutritional needs of the large number of developing countries that had become members of the United Nations and its specialised agencies by 1960. FAO's capacity to undertake a substantial expansion of its programmes and the necessary new activities to meet the growing nutritional needs of these nations was questioned.³ Furthermore, ECOSOC took the stand that a separate organization should be created as all aspects of development would be involved.⁴ In 1961, the WFP was initiated under the joint sponsorship of FAO and the UN on a three-year

1. Richard Symonds and Michael Carder, *The United Nations and the Population Question, 1945-1970* (New York, McGraw-Hill, 1973) pp.127-132.

2. John Cathie, *The Political Economy of Food Aid* (Aldershot, U.K., Gower, 1982), p. 36-3.

3. Jean Siotis, *International Multilateral Food Aid: A Critical Appraisal*, mm., p.11.

4. B.R. Sen, *Interview*, Rome, April 20, 1983.

experimental basis to test the feasibility of using surplus food in support of economic development. The United States gave strong support to the programme, as it sought the involvement of other developed countries in providing food aid for the developing countries,¹ in contrast to its stance until 1960 in opposing the distribution of food surpluses by a multilateral agency. FAO and the UN continued the WFP on a permanent basis from 1965.

The WFP had its own staff and was administered by an Executive Director who was jointly appointed by the Secretary-General of the UN and by the Director-General of FAO. Its governing body is the Committee on Food Aid Policies and Programmes, until 1975 the Intergovernmental Committee of the World Food Programme, comprising 20 members, but since 1975 consisting of 30 member governments, half of which were designated by the FAO Council and other half by ECOSOC. WFP activities could be classified under three principal categories: 'food for work' projects, child and maternal feeding and emergency actions in which it cooperated with the United Nations Disaster Relief Organization (UNDRO), FAO – Office for Special Relief Operations (OSRO), United Nations High Commission for Refugees (UNHCR) and also with other organizations.

In further developments, the FAO/World Bank Cooperative Programme was established in 1964. The World Bank was to finance agricultural projects using FAO expertise. Similar agreements were entered into with the Inter-American

1. K.A. Dahlberg, *Beyond the Green Revolution: The Ecology and Politics of Global Agricultural Development* (New York, Plenum Press, 1979), p. 62.

Development Bank in 1965 and the African and Asian Development Banks in 1967. In 1968 these activities were combined into the Investment Centre.

FOURTH PHASE 1968-1975 – ADDEKE H. BOERMA'S ERA

The decline of the Cold War and failure of the United States in Vietnam led to increasing questions regarding United States' power both abroad and by the American public at home. Western Europe relied less upon the United States for security, increasingly pursued its own interests, leading to the strengthening of its regional institutions. China emerged as a power and became a significant actor on the international scene, resuming its membership of FAO in 1971. An observer noted that, if China did nothing else, it could be argued that feeding one fifth of humanity was a major contribution to FAO's commitment to a world free from hunger.¹

Latin America and Africa increasingly resented outside interference whether by great powers or the UN with the result that the OAS and OAU became more important to them than the UN,² even though, by the late 1960s, the United Nations was dominated by the developing countries. As a result, as Evan Luard concluded, the Afro-Asian countries were able to see themselves as the powerful supporters of the UN as it reflected what they wanted. In the 1950s, except on colonial issues, the UN had reflected what the West wanted. The inequality of states became increasingly evident and the poor exerted what pressure they could in international fora on the rich to redress this disparity. This challenge to the

1. Samuel Kim, *China, the United Nations and World Order*, (Princeton, New Jersey, Princeton University Press, 1979), p. 379.

2. Luard, *The United Nations*, p. 6.

inequality of states acquired additional significance when in the autumn of 1973, the Organization of Petroleum Exporting Countries (OPEC) dramatically raised the price of oil fourfold. This event was followed by great expectations regarding the creation of a NIEO articulated by the Sixth Special Session of the General Assembly.

In the mid-1960s, liberal elites in the West became increasingly concerned, to a degree they had not exhibited before, with the lack of equality with regard to income and wealth between rich and poor states.¹ This new political sensibility could be traced in part as a response to the Cold War but equally to such factors as the disappointment over the failure of development strategies and projections confidently set forth in the 1950s and early 1960s for reasons still in dispute. The Jackson Report elaborated on the disenchantment with development and therefore also aid.²

The complexities of the development process were increasingly realized, leading to doubts as to the degree to which external assistance could effectively promote development. The Pearson Report also elaborated on the suspicions by donors that aid, even when not wasted, had little impact on social and economic conditions while recipients had also expressed dissatisfaction with the efficiency of the aid system.³ Official development assistance increased rapidly between 1956 and 1961, then more slowly until 1967, and in 1968 it actually declined.

1. Tucker, *The Inequality of Nations*, pp. 52-53.

2. *A Study of the Capacity of the United Nations' Development System*, 2 vols. (Geneva, United Nations, 1969).

3. Commission on International Development, *Partners in Development: Report* (London, Pall Mall Press, 1969), p. 168.

Furthermore, there was an especial disappointment with regard to the poor performance of the agricultural sector in developing countries during the early 1970s.¹ Since they were primarily agricultural economies, this was the main reason why the group as a whole failed to achieve the 6 percent growth rate set as a target for total production of the Second Development Decade. The Green Revolution had raised great expectations.

At the Fourteenth FAO Conference in November 1967, Addeke Hendrik Boerma of the Netherlands was elected as the fifth Director-General of FAO, opening a fourth phase of FAO. Boerma expressed concern regarding the malaise surrounding international organizations including FAO.² Conservative elements had begun to feel the UN cost more than it was worth, while youth thought it could do more, he stated at FAO's General Commemorative Conference.

The 1970s saw an increase of political debates and confrontation at the meetings of FAO governing bodies. By 1969 the membership of FAO had risen to 121 countries, predominantly developing countries. It has always been believed that FAO's effectiveness as a technical organization could be maintained only if political activities were limited, both in its governing body and in the implementation of its programmes. During the 1973 FAO Conference, there emerged a new unity among the non-aligned countries, which were soon labelled the Group of 77 (G77). They began to campaign intensively in an attempt to

1. UN Dept. of Economic and Social Affairs, *Economic and Social Progress in the Second Development Decade: Report of the Secretary-General*, E/5981, ST/ESA/68, (New York, 1977), p. 9.

2. A.H. Boerma 'Closing Address' *Report of the General Commemorative Conference, 16 November, 1970* (Rome, 1970), Annex H.

influence the politics and policies of the agency. The United States regarded this as a negative development and felt that the Secretariat had failed to sufficiently enforce the FAO's Constitution and Rules.¹ This criticism of the Secretariat was a general feeling regarding that period as revealed during the writer's interviews. The increased political strength of the developing countries when properly exercised is a positive development.

The World Food Conference (Rome, 1974) resulted in an even more rapid politicization of activities in FAO governing bodies and government delegations adopted many of the political approaches which had previously been confined to politically oriented international fora such as the General Assembly.²

While Boerma, the Director-General during the entire fourth phase, was criticized for his inability to control increased politicization, his strength lay in promoting UN cooperation. The UN agencies had come under criticism for promoting their own domains at the expense of the effectiveness of the entire system and he wanted to see this rectified.³ Although he mentioned cooperation in many of his speeches, it can be questioned as to how much was actually achieved. Boerma continued to believe that too much was left to the heads of UN agencies and that there should be more cooperation if the UN system was to succeed.⁴

Boerma had been a career civil servant in the Netherlands, holding various senior administration positions in the area of food and agriculture, before joining

1. *Official Report of the United States Delegation to the Seventeenth Session of the FAO Conference, Rome, November 10-29, 1973*, p. 54.

2. *Official Report of the United States Delegation to the Eighteenth Session of the FAO Conference, Rome, November 8-27, 1975*, p.52 and Phillips, *FAO: Its Origins, Formation and Evolution, 1945-1981*, p.77.

3. Addeke H. Boerma, *A Right to Food: a Selection from Speeches* (Rome, 1976) pp.115-130.

4. A.H. Boerma, *Interview*, London, January 2, 1983.

FAO. In 1948 he was named FAO Regional Representative for Europe, becoming Director of the Economics Division in FAO when the organization was transferred to Rome. He rose to the level of Assistant Director-General within FAO before becoming the first Executive Director of WFP in 1962.

Although they had been proposed earlier, it was during Boerma's time that structural changes were introduced in the Regular Programme, beginning in late 1968 to facilitate FAO's capability to handle its large Field Programme. Increased emphasis was to be placed on nutrition, while forestry was elevated from a Division to a Department.

The establishment of country programming for UNDP financed projects following the Jackson Report affected the Field Programme. The first five-year cycle of country programming took place beginning in 1972. With this development, the planning of field projects by FAO and other executing agencies was greatly reduced but they continued to be responsible for implementing UNDP projects.

In 1975, all FAO's assistance to governments was increasingly directed to small farmers, fishermen and groups such as landless labourers.¹ The World Bank had adopted a policy of increasing the production of small farmers while ILO began its basic needs approach. The Administrative Committee on Coordination (ACC), comprised of the heads of UN agencies, recommended in 1974 that programmes in rural development should be focused so that benefits accrue primarily to the rural poor.

1. *FAO in 1975* (Rome, 1976), pp. 18 and 41.

While the basic theme of Sen's administration had been the FFHC, Boerma's strategy for directing FAO's efforts centred around the adoption of five areas for particular concentration: work on high-yielding varieties of basic food crops; filling the protein gap; a war on waste; mobilizing human resources for rural development; and assistance to countries in earning and economising foreign exchange. The Programme of Work and Budget was organized first under these five areas of concentration and later under six areas of emphasis. These areas, however, were abandoned during the fifth phase as they did not correspond to the basic structure of the organization.¹

In 1969, the *Provisional Indicative World Plan for Agricultural Development* was published. It was later renamed *The Perspective Study of World Agricultural Development*, and was updated for the World Food Conference in 1974. FAO's *Provisional Indicative World Plan* became one of the main themes of the Second World Food Congress organized by FAO and held at The Hague, Netherlands in 1970. This Congress met in an atmosphere of optimism engendered by the technological possibilities of improving agricultural productivity within the Green Revolution and new agricultural methods. Udink, Minister for Development Cooperation in the Netherlands, pointed out at the Congress that whereas in 1963, hundreds of millions were threatened with famine every year, now countries which used to be on the brink of permanent starvation were well on the way to becoming food exporters within a few years.² As with the first Congress,

1. Phillips, *FAO: Its Origins, Formation and Evolution*, p. 74.

2. W.E.B.J. Udink, 'Address to the Second World Food Congress, The Hague, 1970', *Report of the Congress*, Vol. 1, p.83.

delegates were invited in their personal capacities with national meetings held as a preliminary to the Congress.

During the 1960s a complacency regarding world food supply had developed.

As Wharton, writing in *Foreign Affairs* in April 1969, pointed out:

‘It is now generally known that major technological breakthroughs in food production are believed to have lifted the spectre of famine in the immediate future and to have postponed the prospect of Malthusian population disaster. Startling developments have been accomplished in wheat, rice and corn – major food staples in much of the developing world.’¹

With the exception of poor crops in the USSR in 1961 and 1963 and the drought in India in 1965-1966, world grain production – the foundation of the world food supply – rose annually from 1960-1972. This steady growth occurred despite United States production control programmes.

During the early 1970s, however, mass starvation became a reality for the first time since the 1940s. In 1972, the total world output of food declined from the preceding year for the first time in twenty years because of worldwide adverse weather conditions. The shortfalls of grain in many countries including the USSR, combined with two successive dollar devaluations, resulted in heavy purchases from the United States. As grain reserves plummeted, world prices soared. Reserve wheat stocks, which in 1970 amounted to some 60 million tons, were down to about 22 million tons in 1974. The volume of agricultural products exported under the P.L.480 Programme fell to its lowest level ever in 1973-1974, due to domestic supply requirements but it was just at this time that needs for food aid in drought-ridden areas of Africa and Asia became dramatic. The global

1. Clifton R. Wharton, ‘The Green Revolution: Cornucopia or Pandora’s Box’, *Foreign Affairs*, Vol. 47, no.3, April 1969, p.464.

scarcity and resulting high price of grain induced the rich countries to sell their grain rather than make it available for food aid programmes.

At the end of 1973, OPEC quadrupled petroleum prices, causing most developing countries severe balance of payments deficits. Increased prices of food and farm machinery, the four-fold increase in the price of petroleum fertilizer and pesticides, inflation and a deterioration of the trade position of developing countries created a situation of crisis dimensions. While FAO came under severe criticism for failure to alleviate the crisis with regard to the world's food supply¹ it established the Office of Sahelian Relief Operations (OSRO) to coordinate emergency aid to victims of drought in the Sahel in Africa.

Because of the critical situation, the Fourth Conference of the Heads of State of Non-Alignment Nations in Algiers on 5-9 September 1973 urged that a joint, emergency conference of FAO and UNCTAD be convened at the ministerial level in order to formulate a programme of international cooperation to overcome the increasing shortage of food and other commodities and to maintain stable prices.

In the meantime, the United States was regarding the world food situation as an urgent issue demanding an international solution and transcending the complex ongoing questions of agricultural trade. On September 24, 1973, Secretary of State, Henry Kissinger, in a statement to the UN General Assembly, proposed that a World Food Conference be convened under UN auspices. Most European countries viewed the crisis as a periodic scarcity and saw no need for the

1. Edwin McMartin, *Conference Diplomacy: A Case Study: the World Food Conference, Rome, 1974* (Washington, Georgetown University, Institute for the Study of Diplomacy, 1979), p.2.

Conference but cooperated in deference to Kissinger,¹ who felt he had neglected the Third World in his efforts for détente, and was keen on the Conference as a way to win its friendship.²

After agreement by the governing bodies of other agencies in the UN system further debated convening of the Conference, the FAO Conference was held in November 1973. While admitting that some of the programmes necessary to alleviate the food problem were beyond the competence of FAO, the Conference and Secretariat moved to ensure that FAO's special role in the Conference arrangements be respected. In order to ensure its leverage over preparation and follow-up of the World Food Conference, the FAO Conference suggested that the Secretariat, the preparatory sessions and the Conference itself be located at FAO headquarters in Rome,³ as an offset to FAO's perception of the Conference displacing its constitutional role in this field.⁴

Although FAO had held World Food Congresses in 1963 and 1970, there were several reasons that neither the oil producers nor the food producers wanted to have a conference under FAO sponsorship.⁵ Generally, the oil countries felt that FAO was too dominated by the rich industrial countries, particularly in regard to those trade and aid aspects under the control of the Committee on Commodity Problems. The food-producing countries, while preferring to keep agricultural trade negotiations within the confines of FAO and the GATT, were dissatisfied

1. McMartin, *Conference Diplomacy*, p. 28.

2. Edwin McMartin, *Interview*, Washington, D.C., June 1981, and Andrew Lycett, *International Herald Tribune*, February 1-2, 1986.

3. Thomas G. Weiss and Robert S. Jordan, *The World Food Conference and Global Problem Solving* (New York, Praeger, 1976), p. 14.

4. McMartin, *Conference Diplomacy*, p.2.

5. Dahlberg, *Beyond the Green Revolution*.

with FAO bureaucratic rigidity in other areas and, perhaps more importantly, wanted to find a means for including the Soviet Union, not then a member of FAO, in the negotiations. Furthermore, grain-exporting countries tend to regard FAO as a club of the food-deficit countries.¹

Sayed A. Marei, former Minister for Agriculture and Agrarian Reform of Egypt, was appointed as Secretary-General of the World Food Conference, which was held under UN auspices in Rome in November 1974. The Conference did achieve a consensus on a strategy designed to alleviate hunger and malnutrition, recommending the establishment of the International Fund for Agricultural Development (IFAD) and of the World Food Council (WFC). IFAD was to attract new funding for agriculture, especially from OPEC countries, which refused to channel their aid to agriculture through the World Bank. The WFC was established to deal with the politics of food.

Another conference in which FAO played a leading role and which fundamentally influenced FAO was the United Nations Conference on the Human Environment, held in Stockholm in 1972. The United Nations Environment Programme (UNEP) established by the Conference began its work by setting priorities for environmental work. Many of these concerns such as conservation of land and water resources, of fisheries and genetic resources were already areas of FAO's operation. Cooperation with UNEP provided increased financial support to strengthen existing work and undertake further activities: the Conference Report

1. Stephen S. Rosenfeld, 'The Politics of Food', *Foreign Policy*, no. 14, Spring 1974, p. 27.

reflects the fact that FAO ensured it would continue to be responsible for implementation, as more than thirty recommendations directly addressed FAO.¹

FIFTH PHASE: 1976-1985 – LEADERSHIP OF EDOUARD SAOUMA

This phase witnessed an erosion of East/West détente with the end of what Stanley Hoffman has called the Kissinger cycle in U.S. foreign policy. With the Soviet invasion of Afghanistan and the advent of the Reagan administration, East-West relations deteriorated to Cold War tactics. Other trends of the early 1970s, however, continued throughout the decade and some into the 1980s. Developing states and their interests continued to dominate the United Nations fora, leading to increased cynicism regarding the UN in the West.

While further ad hoc global conferences continued to be held on topics such as water, desertification, energy and science and technology for development, there was an end to further proliferation of major mechanisms. In each case there was an attempt to create some institutional arrangements for follow-up and financing within special accounts of existing organizations.

In the early 1970s the development debate had shifted from aid to the restructuring of the world economic system. The South's demands for reform of international policies and procedures became increasingly strident, leading to a rejectionist response from the North confronted with its own unemployment and other economic and political problems. The Brandt Report published in 1980 attempted to provide some common ground for North-South relations, but it soon

1. *Report of the United Nations Conference on the Human Environment, Stockholm, 5-16 June 1972*, (New York, United Nations, 1973).

became apparent that there would be little if any implementation of its major recommendations such as a massive transfer of resources and a rolling back of protection. IFAD and International Development Agency (IDA) funds were cut, as were financial resources to UNDP. Furthermore, donor countries channelled more aid bilaterally.

The economic situation in developing countries had deteriorated in the 1980s. Non-oil commodity prices fell to their lowest level in three decades and oil prices also drastically declined. Furthermore, the rise in interest rates also greatly increased the developing countries' debt burden. Civil strife increased, especially in Africa and, to make matters worse, in 1984-1985, Africa fell victim to one of the severest droughts in history.

The development that had the greatest impact on FAO during this decade was the financial crisis in UNDP, which began in 1975 because UNDP was traditionally the main source of support for them. There was a large cutback of both FAO's Field Programme and staff. The Field Programme is essential for maintaining a good Regular Programme in terms of statistics and information.

The flow of resources has been uneven, with the result that certain benefits foreseen from UNDP country programming introduced in 1972 were not realized. The ability of FAO to plan its provision of technical assistance based on a continuous flow of resources over a five-year period did not materialize.¹

UNDP funding for FAO programmes reached its peak in 1981. Since then the reduction was sharp. Total resources for the Third UNDP Five-Year Cycle (1982-

1. FAO, *Review of Field Programmes 1980-1981*, (Rome, 1981), p. 5.

1986) were 45 percent less than the original target and the amount committed to agriculture declined.

Fortunately, technical assistance supported by Trust Funds continued its steady growth since the early 1970s and in 1983, FAO's technical assistance delivery supported by Trust Funds exceeded that funded by UNDP for the first time.¹

FAO during this period also developed its own Technical Cooperation Programme (TCP). Its TCP, an integral part of the Regular Programme, was established in 1976 for the provision of emergency and small-scale, short-term assistance in developing countries and came to account for around 10 percent of Field Programme delivery. Donor governments have continually attempted to keep TCP funds low, as they considered that funds for technical cooperation should remain voluntary and channelled through UNDP.

During the 1970s, some major donor countries also began to express concern regarding the increase of the regular budget of FAO,² judging that their national low and no-growth budget situations should be reflected in the United Nations. They considered that in the circumstances, it was reasonable that the entire United Nations system, including FAO, should keep their budgets constant. In 1979, some of the main donors therefore began to abstain on the budget and at the 1981 FAO Conference, five countries voted against the budget, while nine others

1. FAO, *Review of Field Programmes 1984-85*, (Rome, 1985), p. 4.

2. *Official Report of the United States Delegation to the Twentieth Session of the FAO Conference, Rome, November 10-29, 1979*, p.16 and *Official Report of the United States Delegation to the Nineteenth Session of the FAO Conference, Rome, November 12 – December 1, 1977*, p. 39.

abstained.¹ The Conference, nevertheless, adopted a two-year budget of U.S. \$366.64 million and later the 1983 budget was approved at 5 percent net real increase. The developing countries emphasized they would, in the future, push for increased resources while a few main donor countries stressed the need for continued financial restraint.

It was on these stormy seas that Edouard Saouma of Lebanon assumed the helm as Director-General of FAO in 1976. He had been a civil servant in his own country and Minister of Agriculture, Forestry and Fisheries in 1970. He joined FAO in 1962 as FAO's Deputy Regional Representative for Asia and Pacific in New Delhi, becoming the Director of the Land and Water Development Division at FAO headquarters in 1965. He served in that post until becoming the Director-General. Saouma was to become an effective leader of FAO, strengthening the weak administration he inherited. He proved to be an autocratic leader who believed in a strong, independent FAO and has been characterized as having little patience with the procrastination that some of his opposite numbers called inter-agency coordination.²

A general feeling existed that there was far too much trouble between FAO, the WFC and the WFP. There has, however, been less difficulty since 1985 with the relationship between FAO and the WFC. The FAO delegation was, for the first time, led by the Director-General at the annual Ministerial Session of the World Food Council held in Paris in 1985.

1. *Official Report of the United States Delegation to the Twenty-First Session of the FAO Conference, Rome, November 7-26, 1981*, p. 9.

2. 'Friend or FAO? Development Report', *The Economist*, March 1984.

Saouma managed from the beginning of his leadership to control the level of extraneous political activity at FAO conferences.¹ By 1976, the membership of FAO totalled 136 countries, increasing to 156 in 1985. One of the best examples, which demonstrated the diplomatic skills Saouma had, was the ease with which he and his secretariat managed to diffuse the contentious issue regarding the transfer of the Regional Office for the Near East from Cairo to the headquarters in Rome after Camp David,² while continuing to maintain the site agreement between Egypt and FAO and obtaining the concurrence of governments from the region that meetings would again be held in the region in due course. The FAO Secretariat had however secured the assistance of the United States and moderate Arab states.

The delegates from many Third World countries had become highly articulate. It was therefore not surprising that the underlying differences between developed and developing countries have continued with the FAO Secretariat usually supporting Third World positions.³

When Saouma assumed office, he had been authorized to review FAO's work by the 1975 Conference. Many of these changes were in response to suggestions and complaints voiced during 1975 Council and Conference sessions, formulated into a reorientation of FAO's work by the 1976 July FAO Council. Proposed new posts were reduced by two thirds and there was a substantial reduction of

1. *Official Report of the United States Delegation to the Twentieth Session of the FAO Conference, Rome, November 10-29, 1979*, p. 39.

2. *Official Report of the United States Delegation to the Twenty-First Session of the FAO Conference, Rome, November 7-26, 1981*, p. 16.

3. *Official Report of the United States Delegation to the Twentieth Session of the FAO Conference, Rome, November 10-29, 1979*, p. 38.

meetings and publications. Saouma declared a shift of emphasis from long-term conceptual studies to more practical programmes. This meant a downgrading of economic activities such as the *Perspective Study on World Agricultural Development*, International Agricultural Adjustment and country perspective studies.

Some of the savings were used to create the Technical Cooperation Programme (TCP) to give direct assistance to member governments at the Director-General's discretion. The senior agricultural advisors/country representatives ceased working under UNDP auspices and became independent FAO country representatives also paid from savings from the FAO Regular Programme. The senior agricultural advisors worked for UNDP and received 75 per cent of their pay from UNDP and 25 per cent from FAO. However, independent FAO country representatives were paid entirely from the FAO Regular Programme. Saouma was aware that financial independence added to FAO's authority. Other than these moves and the increased use of national institutions, there is little evidence of the decentralization called for by the 1975 Conference to increase FAO's impact. The Western donors reviewed the FAO regional offices.

The main theme of Saouma's administration had been food security. A Food Security Assistance Scheme was established by FAO in 1976 to build up the food reserves envisaged in the International Undertaking on World Food Security. The New International Grains Agreements being negotiated under the auspices of UNCTAD and the International Wheat Council was to include provisions for

stock building and price stability. When these negotiations broke down in 1979, FAO moved to fill the gap with its Five-Point Plan of Action. While calling on the entire international community to implement the Undertaking, the proposed action concentrated on five measures to protect people in the most vulnerable, developing countries:

- (i) 'the adoption of national reserve stock policies and targets by all countries in accordance with the provisions of the Undertaking;
- (ii) the establishment of criteria for the release of such reserves by the FAO's Committee on World Food Security;
- (iii) the adoption of special measures to assist low-income food deficit countries to meet their current food import requirements and emergency needs;
- (iv) new arrangements to intensify and coordinate assistance to developing countries in strengthening their food security, including the establishment of food reserves and
- (v) measures to promote the collective self-reliance of developing countries through regional and other mutual aid schemes.'¹

In 1982, the concept of food security was broadened to ensure that all people at all times have physical and economic access to the basic food they need, with special emphasis on low-income, food-deficit countries. These ideals were further enshrined as a moral commitment in the adoption of a World Food Security Compact at the 1985 FAO Conference. This attempt to create a world food policy is more realistic than Orr's World Food Board because it did not seek legal commitments and overambitious funding from governments.

Since the main problems with regard to food security generally arose in African states, FAO focused on this region in the 1980s. Its Global Information and Early Warning System first alerted the world to the threat of a major food

1. Nurul Islam 'The Five-Point Plan of Action', in Toivo Miljan, Ervin Laszlo and Joel Kurtzman, eds., *Food and Agriculture in Global Perspective: Discussions in the Committee of the Whole of the United Nations*, (New York, Pengam Press, 1980), p. 230.

crisis in early 1983, becoming involved in both emergency and long-term assistance. By 1984, FAO was operating nearly 1000 technical cooperation projects on all aspects of food and agriculture in Africa.

Another consideration during this period was equity. The World Conference on Agrarian Reform and Rural Development (WCARRD), organized by FAO at ministerial level in 1979, resulted in an attempt to orient FAO's work further on the rural poor. Women in development received more attention since they comprised most of the agricultural labourers, especially in Africa. The Declaration of Principles and Programme of Action, *The Peasants' Charter*, endorsed by the Conference was primarily addressed to national governments. Developing countries at the Conference had opposed monitoring and evaluation by anyone but FAO.¹

The WCARRD was significant because it resulted in policy shifts towards the rural poor in agriculture, forestry and fisheries in many countries. Policies shifted from food and industrial agriculture to small farmers, from deep-sea fishing to the small-scale fishing (coastal fisheries and fisheries in inland rivers, and lakes) which comprised 80 percent of the fishing population, and from industrial timber logging for pulp and paper to community forestry and agro-forestry. Community forestry includes farm forestry, community plantation and village wood-lots. In practice, very few governments adopted any significant programmes for agrarian

1. Margaret R. Biswas, *The WCARRD in Retrospect*, Mazingira, 1980.

reform in the first decade after the Conference, thus access to land was determined by demographical and structural factors with negative impacts.¹

Some of the major accomplishments during this period included the initiation of a programme for the control of African animal trypanosomiasis, the programme for the prevention of post harvest losses, and the establishment of the Exclusive Economic Zone (EEZ) Programme to provide assistance to governments for development of their fisheries resources. The first World Food Day was celebrated on October 16, 1981 at FAO and in member countries to increase public awareness regarding the world's food problem with particular attention to the rural poor. In 1981, the study *Agriculture Toward 2000* proposed a strategy for the development of agriculture to the end of the century, especially in Third World countries.

The Fourth World Food Survey was published in 1978 and the Fifth in 1985. The Fourth World Food Survey indicated that per capita food production was declining in a large number of countries in the 1960s and early 1970s. The Fifth World Food Survey indicated that there had been increased per capita food production in some of the poorer countries such as India, although the percentage of malnourished people had declined, as a result of population growth, the absolute numbers of hungry people had increased.

An International Undertaking on Plant Genetic Resources was adopted in November 1983 at the FAO Conference albeit with reservations by some

1. *The Impact of Development Strategies on the Rural Poor: Second Analysis of Country Experiences in the Implementation of the WCARRD Programme of Action* (Rome, FAO, 1988), p. 3

developing countries, fearing they might be denied useful genetic material because of plant breeders' rights and crop variety patenting.¹ An International Code of Conduct on the Distribution and Use of Pesticides was adopted at the 1985 Conference.

Some of these developments are discussed below (in the sections dealing with FAO's overall work and the case studies).

CONCLUSION

In 1942, Frank McDougall convinced President Roosevelt of the United States that food was one of the common problems on which nations which had banded together to win World War II, could continue to cooperate. The United States hence convened the Hot Springs Conference, which founded FAO, under the slogan of freedom from want.

Although most international cooperation under FAO has been concerned with field projects, there was parallel work in gathering, analysing and disseminating information and conducting meetings. Technical assistance activities were begun soon after the War and increased as funds became available. Under the political leadership of B.R. Sen, FAO was transformed from a technical to a development agency. In 1964, the World Bank began providing investment funds for agriculture in cooperation with FAO.

The UNDP has been the source of most of the financial resources for FAO's field programme delivery in all aspects of food and agriculture. They continued to

1. M.S. Swaminathan, *Genetic Conversation: Microbes to Man*: Presidential Address, XV International Congress of Genetics, New Delhi, India, December 12-21, 1983.

increase until 1975 when UNDP experienced its first financial crisis and reached a peak in 1981. After declining again, they stabilized in 1985 at about the 1975 level in real terms. By the early 1970s, the trust funds given to FAO by various countries began to increase and exceeded resources from UNDP for the first time in 1983. In 1976, FAO also established its own Technical Cooperation Programme funded from its regular budget.

The evolution of FAO as a development agency was part of the trend of the United Nations system to reflect the needs of the developing countries. An increasing number of developing countries had gained independence and began to exert pressure for funds and institutions to assist their economic and social development. Over half of FAO's membership achieved independence since the Organization was formed.

Confrontation between developed and developing countries began during the latter part of Sen's administration and persisted as the interests of the two groups were at variance on a number of issues, especially the budget. As developing countries became more articulate and had the majority, politicization of the organization increased, especially under Boerma's administration. Saouma managed to diffuse and keep the introduction of irrelevant political issues at FAO fora to a minimum. Saouma also managed to strengthen FAO in other ways. He reduced meetings and publications and conceptual studies in order to make FAO more operational. FAO country representatives were appointed to most developing countries in an attempt to decentralize FAO.

The late 1960s had witnessed disenchantment with aid. FAO came under increasing criticism and scrutiny during the African famine in 1973 and 1974. This catastrophe among other factors led to the call for the World Food Conference, held in 1974.

The most significant outcome of Saouma's leadership in the 1980s was its enhanced focus on Africa, a culmination of FAO's forebodings about the impending crisis in Africa.

CHAPTER 3

FAO INFORMATION ACTIVITIES

The principal primary sources relied on in the following pages were:

1. FAO, *Review of the Regular Programme 1980-81*, Rome, 1981.
2. FAO, *Consultation on Irrigation in Africa, Lomé, Togo, 21-25 April, 1986*.
3. FAO, *Fact Sheet on the Ethiopian Food Crisis December 1982 – January 1985* [Rome, 1985].
4. *Report of the Council of FAO, Eighty-Sixth Session, Rome, 19-30 November 1984*, FAO, Rome [1985].
5. *FAO: The First 40 Years 1945-85*, FAO, Rome, 1985.
6. *The Global Information and Early Warning System on Food and Agriculture*, FAO, Rome [1983].
7. FAO, *Review of the Regular Programme 1982-83*, Rome, 1983.
8. FAO, *JIU Report on Publication Policy and Practice in the United Nations System*, CL86INF115, Rome, 1984.
9. FAO, *JIU Report on Publication Policy and Practice in the United Nations System*, suppl. 1
10. FAO, *Survey of FAO Periodicals and Annuals*, CL61/17, Rome, 1973.
11. FAO, *Land and Water*, Special edn. for the 40th Anniversary of FAO, 1985.
12. FAO, *Review of the Regular Programme 1984-85*, Rome, 1985.
13. Smith, L. H. [Statement] in *Verbatim Records of Commission II of the FAO Conference, Eighteenth Session, November 1975*, FAO, Rome, 1976.
14. Samaha, Emile K., *FAO's Contribution to a Better Flow of Scientific and Technical Information for Agricultural Development*, FAO, Rome.
15. FAO, *Review of the Regular Programme 1978-79*, Rome, 1979.
16. FAO, *Grass-Roots and Intermediate – Level Training Materials*, Rome, 1986.
17. FAO, *Internal Document*.
18. FAO, *Document Delivery – Principles for a Cooperation Solution, Fourth Technical Consultation of AGRIS Participating Centres, Rome, 28 May – 1 June 1984*.
19. FAO, *Report and Recommendations, Third Technical Consultation of CARIS Participating Centres, Rome, Italy, 7-9 October 1985*.
20. FAO, *Address of the Director-General to the Seminar on AGRIS and International Cooperation for the Exchange of Scientific and Technical Information*, Rome, 1 June, 1984.

INTRODUCTION

FAO was the world's most comprehensive information centre for food and agriculture. Under the Constitution, FAO was instructed to 'collect, analyze,

interpret, and disseminate information relating to nutrition, food and agriculture', including fisheries and forestry. FAO had been accumulating information for forty years not only about and from its member nations but also about all other countries in order to assess the dimensions of the world's food problem and potentials and attempt to formulate solutions to assist governments. It had also inherited the data and publications collected by the International Institute of Agriculture.

Of importance to most nations were FAO's statistical work and technical publications. This chapter argued that information perhaps more than its other functions benefits all nations. The use and dissemination of information within nation states was also discussed. FAO's role with regard to other organizations and states was considered. Major constraints on FAO's work in information included political sensitivities and inadequate information flows within most countries.

FAO'S WORK IN INFORMATION IN GENERAL

FAO, rather than any sovereign state, has been dominant in the international exchange of information and communication with regard to food and agriculture. As an intergovernmental organization it freed a great deal of information from vested state interests and made it available to all governments to use for making decisions and further research. This was one of the main activities which international organizations perform in the international political system.¹

1. Clive Archer, *International Organizations* (London, George Allen & Unwin, 1983), pp.168-169.

The U.S. has been the only country which collects and analyses data on a comparable scale. It, however, gathered information relevant to its own commercial and political interests. The FAO Secretariat was the only organization which continually and systematically collected information on most aspects of food and agriculture. As an intergovernmental institution it had access to information which other countries did not have as it had special relationships with most governments. The organization was generally accepted as being politically objective and provided the same services to governments regardless of their ideologies. This was a significant contribution made by most UN agencies in their fields.

While developed countries, particularly the U.S., collected large amounts of information in countries where they had commercial interests and bilateral assistance programmes, this was not done on a continuous basis. The U.S., for example, had in the past done a great deal of work in the Sudan and Ethiopia. When the regimes in these countries have changed, technical assistance officers and other U.S. personnel have been completely withdrawn or reduced in number.¹

Only certain types of agricultural production information were available from American satellites such as the areas under cultivation, land use, and irrigated areas. Information on agricultural inputs, distribution, pricing, and malnutrition had not been available. The type of cropping patterns on small farms could not be ascertained. FAO publications were utilized by agricultural attachés in U.S.

1. Jonathan C. Randal, 'U.S. Aid to Sudan is Threatened by Presence of Libyans Linked to Terrorism', *International Herald Tribune*, July 16, 1986, p.5.

embassies. The U.S. Department of Agriculture (U.S.D.A.) and FAO exchange information.

While some other international organizations collected and analyzed some information with regard to food and agriculture, it was limited geographically and to certain subject areas. The International Rice Research Institute (IRRI), for example, confined its activities to rice while the OECD was interested primarily in commercial information for marketing by developed countries. If other international organizations required information with regard to food and agriculture, they contacted FAO.

The World Bank has done analytical work on economics and various sectors of agricultural and rural development since the late 1960s as part of its agricultural lending programme. The World Bank has also been engaged in statistical work, in which it cooperated with FAO. FAO has published more technical studies than the World Bank which is a financing institution.

FAO has continued to be the main centre for basic information on food and agriculture. While this was to be expected with regard to fisheries and forestry, it was also true in the crop sector. In addition, even when similar databases have existed elsewhere, FAO's were unique in some manner.¹ Its food information and early warning data system had broader geographical coverage than the U.S.D.A. system established for a similar purpose. FAO was the only institution conducting global international fishery studies and data services. Even the U.S. obtained its fisheries information mainly from this source.²

1. FAO, *Review of the Regular Programme 1980-81* (Rome, 1981), p. 262.

2. [U.S.D.A.] *U.S. Background Briefing Paper*

For poor countries, FAO headquarters functioned as a source of some information with regard to their agricultural development, in spite of the fact that country knowledge was disorganized at FAO. Most developing countries still lacked organized libraries or other information storage and retrieval systems in most sectors including agriculture. They may have had information in certain areas in research institutes or government departments. FAO headquarters and country offices, many of which have established libraries between 1975 and 1985, then became a repository for information for these countries. Libraries in FAO country offices have often been in a mess. The UNDP offices retained reports of the projects it funded but were executed by FAO in various countries. The best libraries in Third World countries were usually those maintained by the World Bank.

While considerable fundamental research has been done by expatriates in most African countries, many of the final reports have ended up on diverse shelves in donor nations. FAO could make an even greater contribution to African countries by compiling lists of these publications. This was the kind of contribution an intergovernmental organization was in a unique position to make. Institutions in France, the Overseas Development Administration in the United Kingdom, and the U.S.D.A. as well as some universities also had valuable collections on African agriculture. Countries, however, sometimes preferred to come to FAO of which they are members, for information. Not only African, but also other countries could obtain basic information about their situation from FAO.

Unfortunately, since the outset, some FAO data have been organized by technical disciplines rather than geographically and access to all data for one country was therefore difficult. This was true in spite of the fact that FAO's development work was conducted within specific countries. The reports from headquarters missions to countries to study situations – generally referred to as field missions – were uncatalogued, and most officials within the bureaucracy were unaware of their existence. The introduction of a country focus would improve country fact books maintained by the Field Programme Development and Liaison Division at FAO.¹

FAO's work in information, as that of other UN agencies, has not been confined to collecting, analysing, and disseminating information. It also attempted to promote common concepts, definitions, and standards for collection and compilation of information in order to ensure uniform international standards.² The questionnaires and documentation of the organization as well as all its technical assistance and training in agriculture have helped here. As discussed in other parts of this chapter, FAO encouraged and assisted its member states to establish their own statistical and other information systems. It has provided assistance not only to developing countries, but also to East European nations. Haas argued that it was doubtful whether any other external means could duplicate the perceived legitimacy of UN systems, and whether many national governments, especially in the developing world, would have generated an interest in information systems in the absence of at least some measure of external

1. FAO, *Review of the Regular Programme 1980-81* (Rome, 1981), p. 266.

2. FAO, *Review of the Regular Programme 1980-81*, p. 245.

stimulus.¹ To some extent this development might have taken place under the auspices of private firms or national governments as countries realized the importance of information.

So much emphasis has furthermore been placed on the publications of the organizations that the amount of information orally transmitted has frequently been overlooked. The wealth of information acquired by competent civil servants by their long-term participation in an international secretariat is often underestimated. This has been another major contribution to both developed and developing countries. Not only governments and professionals, but private citizens could contact FAO for information. If FAO bureaucrats were not in possession of the information, they were invariably able to direct people to where it was available. Many had a broad global professional awareness in their areas of competence. Politically sensitive information was often transmitted orally if necessary even if it did not appear in FAO documents and official statements.

Within FAO itself, centralization of information was a major problem. In its files, working papers and other documentation, FAO had infinitely more information than it actually published. People within each division, not only those in other divisions, were often unaware that useful information on the same topic existed in the same division.

As discussed above, consultants wrote reports which often remained with the officers who commissioned them. They were often not only never published, but

1. E.B. Haas and J.G. Ruggie, 'What Message in the Medium of Information Systems', *International Studies Quarterly*, vol. 26, no. 2, June 1982, p. 196.

sometimes not even circulated within the bureaucracy. At least there should have been a regular published list within the FAO secretariat of consultants' reports.

While both developed and developing countries benefited from FAO's information services, much more information could be made available if information services were completely centralized and made available to users within the bureaucracy and outsiders as in the case of statistical services and marketing of fisheries. This was both cheaper and more effective than the existence of numerous subsystems.

Given this situation it was not surprising that conflicting information continued to be published by different divisions as their sources were diverse. The document *Consultation on Irrigation in Africa* states, 'Most African rivers show considerable variation in flow, a notable exception being the Zaire River.'¹ Another document published about the same time stated, 'With the exception of the Congo, all the major rivers of Sub-Saharan Africa show considerable seasonal variation in flow.'² The Zaire River was a tributary of the Congo River. Which of the two actually had a stable flow or did both? The data used for prices in the Statistics Division were different from those used in the Commodities and Trade Division, both part of the Economic and Social Policy Department.

MAJOR CONSTRAINTS

As an intergovernmental organization, FAO had privileges but it also faced constraints in its information activities. The two major constraints on FAO's work

1. FAO, *Consultation on Irrigation in Africa, Lomé, Togo*, 21-25 April 1986, p. 6.

2. FAO, *Irrigation in Africa South of the Sahara*, FAO Investment Centre Technical Paper 5, p. 6.

in information and that of other UN agencies were political sensitivities and poor information flows within countries. Governments objected to the FAO publishing any information they do not want publicized. They sometimes concealed information from the organization or provided misleading information where vested interests and prestige were concerned. In most cases, governments did not deliberately provide misleading information, but the information they possessed was incomplete and unreliable. There was a limit to the degree to which FAO could compensate for these weaknesses and gaps in the data of countries. These inadequacies existed in all UN agencies.

As in other United Nations organizations, politically sensitive information was not mentioned in official FAO documents or statements. Certain aspects of food production and nutrition were highly politically sensitive issues in most countries, particularly those with hunger problems. Food production and supply were important factors in national security. Food exports have comprised an important component of total export revenue in countries like the U.S., Canada, and Australia. Other countries such as Japan and those in Eastern Europe have increased cereal imports primarily for animal feed and meat production. Many developing countries especially in Asia and increasingly in Africa have been importing food for increasing populations; in 1984 almost one of four Africans (140 million) was dependent on imported grains.

Countries have been hesitant to report crop failures and food shortages that could lead to an escalation of cereal prices which they must purchase in the world market. This has been particularly true of the countries such as the USSR and

China which have periodically in the past needed to import vast quantities of cereals. In 1972, as discussed in the chapter on meetings, the major grain purchases by the USSR disrupted the world markets. In 1973-1974, China was the largest consumer of U.S. wheat, importing more than India. While China provided information to FAO's global information and early warning system, the USSR until 1985 had not joined it. The USSR continued to not report its crop failures and food shortages partly for fear that the news of its intended large purchases could lead to higher cereal prices.

A factor that has proven to be more tragic has been the attempt of poor countries to conceal major food shortages and encroaching famine. In 1974, India attempted to minimize the extent of its hunger problem after originally attempting to conceal its existence. The Indian government took the Australian ambassador to task for his early report of starvation to Canberra.¹ A major famine was however avoided due to government intervention.

India's impressive increase in cereal production in succeeding years during the decade 1975-1985 resulted in self-sufficiency in food production and an end to the famine it had experienced historically. Extensive chronic hunger and malnutrition, however, continued to exist among the vulnerable groups of women, the aged and other poor in some regions. In 1977-78, 48 percent of the people in India were estimated to be living below the poverty line.² Fortunately most of the

1. Professor Hedley Bull, *Discussion*, January 1981. Professor Bull was residing in the Australian embassy compound in India at the time.

2. Govt. of India, Planning Commission, *Report of the Expert Group on Programmes for Alleviation of Poverty* (New Delhi, 1982), p. 1.

poor were not hungry. Many Indian politicians and bureaucrats were very sensitive regarding any mention of this major hunger problem. Others were not.

When at a UN meeting, the representative of the World Bank stated: ‘As the current Indian situation illustrates – where many millions remain malnourished even as the country accumulates a 20 million stockpile of surplus production’.¹

Romesh Bhandri of India proceeded to defend India’s position by stating the stockpile has been presented out of context by the World Bank. He pointed out that during 1977-78, India launched a massive food-for-work programme in rural areas with one million tonnes of food grain from this stockpile intended to generate 400 million man-days of additional employment in return for payment of wages partly by cereals. These people were employed in construction of irrigation systems, roads, and other rural development projects such as afforestation.

What the representative of the Indian government said is true, but what he did not say is that in spite of all these efforts, it is estimated that then as in 1985 over 100 million people in India continued to suffer from chronic malnutrition primarily because they could not afford to purchase food. There was in fact a debate as to whether the absolute numbers of malnourished in India have increased or decreased as there had been a general improvement in the nutritional situation in spite of population growth.

This sensitivity with regard to information on malnutrition was not confined to India. It was a general problem with regard to countries. FAO itself stated:

1. Romesh Bhandri in Toivi Miljan, Ervin Laszlo, and Joel Kurtzman, eds., *Food and Agriculture in Global Perspective: Discussions in the Committee of the Whole of the United Nations* (New York, Pergamon Press, 1980), p. 148.

‘Because of the sensitive nature of the information involved, only limited data are made available to FAO’.¹ FAO has had a data bank on food consumption and nutrition.

These were the types of problems FAO faced with regard to governments, in addition to deliberate attempts of governments to conceal impending famine. If a sovereign state did not wish FAO or other UN agencies to reveal or explore threatening famine within its borders, they could not officially do so. As discussed below, the same was true for WHO and communicable diseases. What the secretariats could do but have failed to do so far was to subtly encourage investigative journalism behind the scenes. It can be argued this was ethical as the end result of famine was invariably a greater tragedy for the nation state concerned and had repercussions for other states and aid organizations.

At times, government officials in capitals have been deliberately callous toward the suffering of the poor from hunger during times of food shortages in the rural areas of their nations. Sometimes officials have not even been aware of the gravity of the starvation in remote regions of the country. This was the state of affairs during the 1973 drought in Ethiopia and also to a degree during the more extensive famine in 1984. There was, however, on the first occasion, a deliberate attempt by the Ethiopian government to conceal the magnitude of starvation.

1. FAO, *Review of the Regular Programme 1980-81*, p. 257.

THE ETHIOPIAN CASE¹

Both times, British television crews alerted not only the outside world to the extent of the famine in Ethiopia, but also some senior members of the Ethiopian government. The following interview with a former member of Emperor Haile Selassie's entourage with regard to events after the film 'Ethiopia: the Unknown Famine' which was shown on British TV in 1973 was revealing.

'Soon afterward we suffered a real invasion of foreign correspondents. A press conference took place immediately after their arrival. "What", they ask "does the problem of death from hunger, which decimates the population, look like?" "I know nothing of any such matter", answers the Minister of Information, and I must tell you, friend, that he wasn't far from the truth. First of all, death from hunger had existed in our Empire for hundreds of years, an everyday, natural thing, and it never occurred to anyone to make any noise about it. Drought would come and the earth would dry up, the cattle would drop dead, the peasants would starve. Ordinary, in accordance with the laws of nature and the eternal order of things. Since this was eternal and normal, none of the dignitaries would dare to bother His Most Exalted Highness with the news that in such and such a province a given person had died of hunger. Of course, His Benevolent Highness visited the provinces himself, but it was not his custom to stop in poor regions where there was hunger, and anyway how much can one see during official visits? Palace people didn't spend much time in the provinces either, because it was enough for a man to leave the Palace and they would gossip about him, report on him, so that when he came back he would find that his enemies had moved him closer to the street. So how were we to know that there was unusual hunger up north?

"Can we," ask the correspondents, "go north?" "No, you can't", explains the minister, "because the roads are full of bandits". Again, I must remark, he wasn't far from the truth, because increased incidents of armed disloyalty near highways all over the Empire had been much reported of late. And then the minister took them for an excursion around the capital, showing them factories and praising the development. But with that gang, forget it! They don't want development, they demand hunger and that's all there is to it. "Well", says the Minister, "you won't get hunger. How can there be hunger if there is development?"²

1. Secondary sources had to be used as it proved impossible to obtain the information from FAO and WFP.

2. Ryszard Kapuściński, *The Emperor: Downfall of an Autocrat* (London, Harcourt Brace Jovanovich, 1983), pp. 111-112.

Jack Shepherd in his book on that famine commented on how the Ethiopian peasants had invariably starved before harvests. According to tradition, Ethiopian people obeyed their Emperor, their Imperial Government, their Orthodox Church – they starved quietly. In 1973, their tradition changed leading to the crumbling of the 2000-year-old empire.¹ It was later suspected in diplomatic circles that older ministers and perhaps the Emperor himself had underestimated the impact of the drought and hoped that a good harvest and traditionally docile peasants would protect the government in the situation.

Shepherd detailed how the Haile Selassie regime, the Imperial Ethiopian Government, was publicly suppressing discussion of the drought and famine in 1973, while at the same time privately meeting with potential relief donors. It wanted massive help, but it wanted it quietly. The government approached WFP, UNICEF, FAO, UNDP, USAID and other donors such as the EEC and China for food aid and relief supplies, but requested that the famine be kept a secret. A fraction of the aid required was requested as USAID and WFP quietly responded. The total amount of grain pledged by all donors in May 1973 was only half the amount required and furthermore by November none of it had arrived. Food aid from the U.S. was delayed because of the heavy demand on shipping in part because of wheat sales to the Soviet Union. The officials in international agencies and embassies either ignored or failed to comprehend the catastrophe. To be fair to these potential donors, it must be stated that they did in the early stages seek a meeting of all foreign agencies with the government to plan and coordinate a

1. Jack Shepherd, *The Politics of Starvation* (New York, Carnegie Endowment for International Peace, 1984), p. 2.

massive relief effort, but their request was rejected. According to Shepherd, the Imperial Ethiopian Government was afraid such a major undertaking would reveal the existence of the famine. The potential donors complied with the request of that government to keep the famine a secret. National sovereignty was regarded as of greater importance than human life. Foreign embassies obliged a friendly government. UN agencies were more concerned with preserving good working relationships with the Imperial Ethiopian Government than saving lives.

If the WFP report compiled in July 1973 on the starvation had been publicized, large-scale relief might have been poured into Ethiopia six months earlier. Now this only occurred after the famine had been televised in Great Britain. According to Shepherd, WHO behaved in an especially irresponsible manner by failing to report the cholera epidemic which occurred during the summer of 1973 – such epidemics were not uncommon during famine. With its international communicable disease warning system, it was required to report the disease as nomads wandering into neighbouring countries such as the Sudan and Kenya were carrying the disease. The Imperial Ethiopian Government refused to submit a request for help to WHO. The government, worried about a quarantine against its experts, embarrassment and a decrease in tourism, instructed the agencies to remain silent. One UN official explained that it was not the job of the United Nations to go public. He argued that international organizations work under clear rules carrying out programmes requested by countries.¹

Neither did the international community seem to learn as ten years later, greater numbers of people were to starve in Ethiopia. This time the Ethiopian

1. Shepherd, *The Politics of Starvation*, p. 27.

government through its Relief and Rehabilitation Committee (RRC), established after the 1973 drought to deal with famine, accurately predicted the impending tragedy and appealed to donors repeatedly for aid. FAO, other U.N. agencies and bilateral donors, however, underestimated the tragedy. Donors had become sceptical with regard to Ethiopia's appeals for assistance and FAO's requests for increased food aid to countries in Africa facing food shortages because of drought and civil strife. Neither were Western governments, particularly the U.S. and Great Britain, keen on supporting the Soviet-backed Marxist regime in Ethiopia. When there was a famine, countries however did respond and relied upon FAO to assess food aid requirements given its objective role in the international community.

While the Ethiopian situation had been monitored by the FAO/WFP Task Force created for reporting on African countries, it was just one more country on a list of over twenty countries facing food shortages compiled by FAO.¹ What, however, had an infinitely greater negative impact was the error in the FAO/WFP mission's estimate of the amount of food aid that could be transported and distributed in the North where most of the famine areas existed in 1984. Had the mission dispatched from FAO's Office for Special Relief Operations in February 1984 endorsed the RRC's version of the emergency aid requirements, the mission might have succeeded in prodding governments into an urgent response to the RRC's requests for additional food aid before such vast numbers of people starved. FAO/WFP members 'thought there would be hardship, but not a famine',

1. Peter Gill, *A Year in the Death of Africa: Politics, Bureaucracy, and the Famine* (London, Paladin Grafton Books, 1986), pp. 42-43.

a member of the mission told Peter Gill.¹ The RRC calculated they required 900,000 tons of grain, but requested only 450,000 tons as they felt that was all they could handle for logistic and security reasons while they were capable of handling all they required. The FAO/WFP mission estimated that ‘due to logistic constraints only 125,000 tons can be transported and distributed in the North’² where most of the famine areas were located. The publication of these figures was furthermore delayed till June. The mission talked to FAO experts and the Ethiopian Central Statistical Office arriving at figures which both FAO field staff and the RRC who knew what was happening refused to accept. There was further confusion as to how many local stocks Ethiopia actually had and how much food aid had actually been received by the country.

The United Nations agencies have authority and when there is doubt governments and voluntary agencies expect UN agencies to confirm the need for famine relief.³ Another FAO mission in December 1984 supported the RRC’s assessment but by this time thousands of people had starved needlessly. The Director-General of FAO stated to the Council that the ‘easiest answer is to blame international organizations which are accused of various but contradictory shortcomings’.⁴ Unfortunately, they were to an extent to blame.

On the other hand, governments were aware of the deteriorating situation.

American satellites indicated the ground was barren, yet people starved in vast

1. Gill, *A Year in the Death of Africa*, p. 50.

2. FAO, *Fact Sheet on the Ethiopian Food Crisis December 1982-January 1985*, mm., p. 3, and Gill, *A Year in the Death of Africa*, p. 44.

3. Adrian Wood, ‘Aid and Politics in Ethiopia’, *Land Use Policy*, v. 3, no. 4, October 1986, pp. 358-359.

4. Report of the Council of FAO, Eighty-sixth Session, Rome, 19-30 November 1984, Appendix D.

numbers before the U.S. government agreed to give aid. Donors, furthermore, were aware of the fact that the Ethiopian government had an unusually efficient information and early warning system which had been established with their help. Private relief agencies had also pointed to crises of tragic proportions. Donors were displeased with the behaviour of the Ethiopian government which was obsessed with its costly celebration of the tenth anniversary of its Revolution in the months when famine was mounting. During this period, the government spent not only hundreds of millions of dollars on the celebrations but mobilized the country's manpower to prepare for the celebrations. Money was spent on lavish, prestigious projects such as the introduction of Africa's first Boeing 707 by Ethiopian airlines. Western donors felt that the lack of incentives for farmers combined with all the rigidities of a centralized economy had limited the country's ability to solve its own problems.

OTHER POLITICAL SENSITIVITIES

Governments were not only sensitive to their hunger problems and other issues of national security, but also to other facts that reflected on their image and prestige. After the dramatic four-fold increase in oil prices in 1973, the Near East nations deliberately requested that the statement that increased oil prices could endanger food production be deleted from the 1973 FAO Conference report.¹ The fact that high oil prices were a contributing factor to food problems of poor

1. *Official Report of the United States Delegation to the Seventeenth Session of the FAO Conference, Rome, November 10-29, 1973*, p. 13.

countries was common knowledge.¹ There was, however, in the aftermath of the Arab oil embargo an unrealistic attempt by Western countries to place the responsibilities for the plight of poor countries primarily on oil exporting nations. Fertilizer and oil prices both fell within the decade 1974-1984.

FAO documents as other UN documentation were often bland as they could not contain any statements interpreted as criticism of their member governments. Terminal reports of field projects executed by FAO often presented blunt criticisms of the problems within countries. The circulation of these reports was confined mainly to FAO, the country, and the funding agency of the projects

THE FOOD INFORMATION SYSTEM

The FAO Food Information System or Global Information and Early Warning System on Food and Agriculture (GIEWS) had probably saved many lives by its prediction of food shortages. It had two objectives: to monitor the world supply/demand outlook for basic foods and fertilizers in order to assist governments to take action in quickly changing situations; and to identify individual countries and regions where serious food shortages were imminent and assess possible emergency food requirements. Participating in the system was open to all countries which were members of the United Nations or its specialized agencies. A number of developing countries in the early 1980s were still unable to participate due to inadequate national food information systems. Yet it was precisely in these countries where early warnings of potential food shortages were

1. Mrs Bandaranaike cited in Sayed Ahmed Marei, *The World Food Crisis*, (London, Longman, 1976), p. 26.

needed to prevent widespread hunger. The GIEWS and national systems functioned comparably better in 1985 than 12 years earlier.¹

The system has been mobilizing food shipments to meet emergency needs.² For example, based on information from the system, the Director-General of FAO convened a meeting in September 1980 to warn of an impending food shortage in 26 African countries south of the Sahara. The donor response was immediate and during the period September 1980 until August 1981, the affected countries received over 2 million tons of food aid. Thus both donors and recipients benefited from the system.

INADEQUATE INFORMATION FLOWS IN COUNTRIES

Perhaps an even greater problem than these political sensitivities was the quality of the information as FAO did not collect information within countries, but depended primarily upon information provided by governments. In most instances the organization had neither the money nor manpower to check the reliability of the information. The general situation with regard to availability and quality of information in agriculture and rural development has improved dramatically in some countries, such as Thailand and India; in 1965 there were very few locally published books and periodicals available there, whereas in 1985 there existed tremendous technical literature in those two countries. In Thailand, the advent in the early seventies of a truly functioning democracy was a factor.

1. *FAO: The First Forty Years, 1945-1985* (Rome, 1985), p. 33.

2. *The Global Information and Early Warning System on Food and Agriculture* (Rome, FAO [1983]), p. 12.

The fact that technical capability became a major consideration for promotion proved an incentive to scholars.

To attach too great an importance to the role of democracy with regard to technical publication can be an oversimplification. Publishing increased during the Marcos regime in the Philippines, in part because of the American influence. Under the more democratic Aquino government the quality of agricultural information, however, improved and publishing continued in spite of civil strife. While agriculture may be technical there were always political and economic aspects, such as who controls fertilizer sales or marketing of produce. Manpower, money, and peace can be as crucial factors as democracy with regard to all technical information flows and systems. In small countries, if the few trained technicians and documentalists leave, there was no one to continue the systems. In the Middle East publishing has increased particularly in Egypt but also in Morocco, Tunisia and even in Iraq – during the protracted war with Iran. Meanwhile Egypt's food imports had increased to over 60 percent of its food supply in 1985. There has been considerable development with regard to agricultural information in most Latin American countries except Bolivia and some Central American countries, because of their political instability.

FAO's work in technical assistance and training and publications in all aspects of agriculture has played a role with other technical assistance in improvement of agricultural information systems in the countries. In the vast majority of countries, dramatic developments have not taken place. This failure to develop information systems cannot be regarded as a failure of FAO's work. In some countries such as

Iran and Mozambique existing information systems deteriorated because of changes of government and civil strife.

Unfortunately, information systems have deteriorated in many African countries because they have failed to maintain the information systems and civil service standards established under colonial regimes. Loss of government staff due to low salaries and bad working conditions has also been a contributing factor. The weakness of statistics and other information systems in most African countries affects the availability and reliability of data.¹ Civil strife and economic problems in non-African countries which interfered with civil service functions could have a negative effect.

As stated earlier, while most countries presented the best information they had, it was not uncommon for countries to provide misleading information where vested interests or prestige was concerned. As in the case of countries concealing epidemics to protect tourism, nations occasionally attempted to deliberately conceal outbreaks of animal diseases in a bid to protect their export markets for livestock products and image, as discussed in the chapter on FAO's work in animal health.

Some governments tended to provide inflated production figures in order to portray themselves as having better agricultural development than they actually had. In other instances, governments deliberately produced pessimistic data, hoping to receive an increased flow of external aid.² If countries desired investment from the World Bank or the regional banks, it was to their advantage

1. The World Bank, *Financing Adjustment with Growth in Sub-Saharan Africa, 1986-90*, p. 63.
2. Susan George, 'More Food, More Hunger', *Development: Seeds of Change*, no. 1/2, 1986, p. 56.

to present inflated production figures, implying they were in a better position to repay loans than they were. If they wanted food aid or technical assistance from FAO, it was to their advantage to provide lower production figures. FAO could check production figures to a degree from other published documents, newspapers, field staff and intelligence sources such as the U.S. Central Intelligence Agency. In the early 1980s, when Vietnam provided figures indicating adequate production and then proceeded to apply for emergency food aid, FAO became suspicious. Vietnam was, however, a state and had received food aid from the World Food Programme in past years, despite the objection of the U.S. and some other countries which believed the aid went to support Vietnam's war effort in Kampuchea. It would probably be in the best interests of all including the governments providing the information, if they were honest to begin with.

Inflated or deflated production statistics might on occasion influence the aid recipients received from international organizations. Such information would, however, influence the allocation of bilateral aid only marginally as it has been provided primarily for political considerations, such as military bases and historical precedence, except in times of famine. Former colonial powers such as Britain and France provided aid primarily to their ex-colonies. In 1984, while Britain provided humanitarian aid, Timothy Raison stated that Great Britain would have no development aid programme in Ethiopia. He pointed out that Britain gave more readily to friends than to enemies.¹ According to Raison, Ethiopia was a Marxist regime and Britain was already providing development

1. Gill, *A Year in the Death of Africa*, p. 113.

assistance to over 120 countries, concentrating on Commonwealth countries. To be fair to Britain, it contributed to the EEC which had a development programme there. Communist Vietnam obtained aid only from Sweden among the Western donors, no matter how desperate the needs of its ordinary citizens.

Bilateral aid agencies utilized statistics and technical reports of countries, particularly if they were published by international agencies, in order to develop their projects and programmes within developing countries. Such information can also be used to justify aid programmes to Parliament by donors. Most donor governments submitted reports to Parliament.

The same factors applied with regard to information in WHO and other United Nations organizations.¹ All these institutions could do was to analyze the information that they received or prod governments for better information when inaccuracies were obvious or they knew more information was available. Even when information provided by governments was reliable, it was often incomplete. Many countries, particularly in Africa, had limited or no information in many areas. While some countries concealed information on malnutrition many had no information to conceal. Hospital records comprised the prime source of information on malnutrition in Africa. While Asit K. Biswas summarized the situation with regard to land use in Africa; this was unfortunately also true in other areas.

‘Adequate land use data in most African countries are generally not available. They are often seriously incomplete or are nominally complete but their reliability is unpredictable because of lack of properly trained land use specialists, who can collect, analyze and manage the data. Even when good land use data for a region have been collected and analysed, they are often not easily accessible because of

1. Asit K. Biswas, ‘Water for the Third World’, *Foreign Affairs*, vol. 60, no. 1, 1981, pp. 148-166.

inadequate data management facilities. Thus, it is fairly common to find that whatever data have been collected on various aspects of land use are more readily and easily available in FAO in Rome as compared to countries themselves. This does not make national efforts at land use planning any simpler. These type of problems cannot be resolved until and unless more land use professionals are trained in the various countries, who can manage such activities on a long-term basis. Use of expatriates can only provide a short-term solution. Thus, education and training in land use has to be a priority consideration for all African countries'.¹

USE AND DISSEMINATION OF INFORMATION

In spite of its imperfections, FAO's service with regard to information has made an invaluable contribution to food and agriculture and benefited both developed and developing nations. The same information was universally disseminated to all its member states, providing in this manner a basis for common ground and increased international cooperation. While research at the U.S.D.A. also attempted to depict global activities, it was only FAO and the World Bank which distributed their publications globally. The World Bank published in languages other than English only selectively.

The FAO secretariat not only made its publications available globally but did so in all its working languages. Originally these were French, English and Spanish, but during the late 1970s Chinese and Arabic also became official working languages for some publications. A few documents have also been published or republished in non-FAO languages such as Portuguese, Swahili and Greek. The Japanese FAO Association with limited resources translated many FAO publications into Japanese. UN agencies such as WHO, UNESCO and ILO, where the USSR was also a member, had Russian as a working language.

1. Asit K. Biswas, 'Land Use in Africa', in *Land Use Policy*, vol. 3, no. 4, October 1986, p. 259.

While China was only one country it represented over one-fifth of the world's population. Deprived of foreign contacts and freedom to conduct research during the Cultural Revolution, most Chinese scholars were keen to read any information they were able to obtain. Progressive administrators and farmers were keen to adopt and implement new ideas especially since the change in economic policy. The Chinese exercised discretion and advised FAO with regard to the documentation which they actually needed to have translated into Chinese. Here alone FAO has made a great contribution.

FAO pursued a policy of encouraging external publishers to publish FAO books in non-FAO languages, particularly the grassroots type of publications such as training materials at the village level for farmers. This was done in a very limited manner.¹ The need for publication of FAO and WHO materials in local languages was recognized early and has also been encouraged. This became a common policy among international organizations as it frequently did not cost them much money. For token amounts of money such as \$300-\$500, a local publisher in a developing country could be encouraged to publish FAO or other UN documentation in the local language in the early 1980s.

Not only did FAO make publications available that most countries would not be able to produce themselves, but it did so at relatively low prices in addition to its free distribution of a certain number of copies. As in other UN organizations a certain number of publications were distributed free to governments, depository libraries and computerized lists of users in institutions in member states. FAO, however, had a unique quota system whereby the number of quota copies was

1. FAO, Review of the Regular Programme 1982-83 (Rome, 1983), p. 111.

related to the contributions of states to the FAO budget of the Regular Programme.¹ The rich states which paid more received more documents free. The result was that the poor countries which needed them most received fewer copies. Governments could, however, purchase additional copies at a 50 percent discount and clients in developing countries not only received a discount but could purchase more copies in their currencies. The free documents were received by Ministries of Agriculture. If the Ministry of Industry or Education wanted copies, it had to pay for them. Documents were also made available to depository libraries at universities and research institutes around the world on condition they made them available free to the public. Distribution lists were compiled by the technical divisions which initiate the publications, but were often not adequately updated.

The number of professionals had however increased to such an extent that it was impossible to reach them all. In FAO's experience a target audience had been easy to identify from the contents, but it was difficult to predict who the individual readers were going to be until people bought publications.² The Executive Board of the WHO had come to the same conclusion: 'the main importance of sales resides in the fact that only in the case of such publications as are purchased is it possible to have some certainty that they are finding their way into the hands of persons who really read them'.³ The United Nations, however,

1. FAO, *Survey of FAO Periodicals and Annuals*, CL 61/17, (Rome, 1973), pp. 2-3.

2. FAO, *JIU Report on Publications Policy and Practice in the United Nations System*, CL 86/INF 115 (Rome, 1984), p. 2.

3. FAO, *JIU Report on Publications Policy and Practice in the United Nations System*, suppl. 1, p. 9.

generally argued that the persons in the developing nations who need the publications could not afford to purchase them even at reduced prices. If Third World governments could afford weapons and Mercedes-Benz cars, they certainly could afford to provide their professionals with money to purchase FAO publications in local currency.

Sales of documents have been greater in industrialized countries than in developing nations. In 1983, purchases in twelve countries (Australia, Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Spain, Switzerland, the U.K. and the U.S.A.) accounted for 75 percent of FAO's total sales.¹ In spite of the tremendous amount of information available to professionals in these countries, they continued to need FAO's publications because, as discussed in other sections, much of the information was not readily available elsewhere.

To the extent that sales are an indicator of usage, it can be argued that most FAO documents were read to some extent as sales exceeded free distribution.² A few have been so heavily used that they have been reprinted several times. Some became fundamental texts. For example, *Crop Water Requirements* was used in every country with irrigation and *Trickle Irrigation* was used as a textbook.³

The main problem, however, in all countries was that the professionals who could utilize the documentation were not aware of either the publications or what use they could make of them. While this is part of the general problem of this age of excessive information, it is worse in the case of FAO for two reasons. Although

1. FAO, *JIU Report on Publications Policy and Practice in the United Nations System*, 1984), p. 2

2. U.N., *Publications Policy and Practice in the United Nations System*, A/39/239 (New York, 1984) p. 15.

3. FAO, *Land and Water*, Special Edn. for the 40th Anniversary of FAO, 1985, p. 25.

FAO had distribution and sales offices in most of its member nations, its publications had not been reviewed nor advertised. Many of the publications were not even listed in its catalogues. It did all its publishing itself so there was no commercial advertising. Secondly, the distribution of free FAO material within countries was primarily the responsibility of the governments themselves. As a result it might remain in the ministries of agriculture where it arrived.

In developing countries, the situation varies.¹ In many African countries such as Senegal and Zambia, even if they did not have organized libraries, some documents were heavily used. In India, the Ministry of Agriculture in New Delhi has been referred to as a mini-FAO because of the degree to which FAO ideas and documents are considered.² It was, however, questionable how many if any of FAO publications reached the state governments where the implementation actually occurs.

In developed countries, well-organized FAO libraries exist. The documents are catalogued and utilized to varying degrees. When the author was conducting research in FAO libraries in the ministries of agriculture in Canada and Great Britain, they were hardly used at all. In Great Britain, the collection of FAO documents in the Overseas Development Administration's library were being used. In the month 15 July, 1983 to 15 August, 1983, the FAO library, which is a part of Agriculture Canada's main library, was used a few times mainly by aid

1. In an extreme case one of the author's friends on a mission to an African country in the late seventies found an FAO publication he needed in storage at the harbour with other FAO documents. He was told the publication didn't exist by government officials, but he knew it did and proceeded to act.

2. C.S. Singh, Chief, Fertilizer Division, Dept. of Agriculture, India, *Interview*, Oxford, UK, Feb. 15, 1984.

officials from the Canadian International Development Agency. These well-organized libraries should have been used more frequently as the information was useful if people were aware of it.

Other UN organizations such as WHO and ILO took somewhat more action to channel information to appropriate users. FAO itself concluded that more progress needs to be made to improve the dissemination of its publications.¹

Other UN organizations had some of their documents published externally to assist with dissemination. FAO was probably the only UN agency within which all publishing had always been done by the organization itself.² With the exception of Oxford University Press, commercial publishers, however, had a very limited distribution in Third World nations and sold their books at high prices.

In the decade 1975-1985, publishing had become increasingly commercialised and most technical books became too expensive for most individuals to purchase even in developed countries. FAO's information could however be made available even more cheaply and quickly if more of the production were externally done. Only the printing of the publications was done by commercial publishers in Italy in 1985. Translation by FAO staff of documents from a field mission to countries could be as expensive as the cost of the mission itself.

Nevertheless, FAO has made a tremendous contribution in making information available to its users in all countries. The impact of this information on national and international policy unfortunately cannot be measured.

1. FAO, *Review of the Regular Programme, 1984-85* (Rome, 1985), p. 90

2. FAO, *JIU Report on Publications Policy and Practice in the United Nations System*, p. 2.

Considering how the documents are utilized in India and China, the cost of all publications could be compensated for if even one major decision was influenced in these highly populated countries.

As Ernst Haas concluded, the present state of knowledge about information was such that no full-scale investigation of any of its possible effects on international policy and politics was possible.¹ He argued that international information systems can effect change in the international political system in several ways. They might upgrade the quality or sophistication of decision-making and policy throughout the world, by providing greater uniformity of access to specialized information that some or perhaps many decision-makers previously lacked. This was the intended objective of international information distribution but did not necessarily lead to increased international harmony, as access to information could also sharpen conflicts of interest.

Information from international organizations made possible some net transfer of information from North to South whether in the realm of basic research or more politicized data concerning trade, technology or capital. It also provided the occasion for the independent production of agricultural information by the South itself. Information exchange sought to compensate for the lack of appropriate resources in developing countries by enhancing their ability to attain food security.²

1. E.B. Haas and J.G. Ruggie, 'What Message in the Medium of Information Systems?', *International Studies Quarterly*, vol. 26, no. 2, June 1982, pp. 191-192.

2. J.G. Ruggie and E.B. Haas, 'Information Exchange and International Change: The Case of Infoterra', *International Relations*, vol. 7, no. 1, May 1981.

Access to knowledge could lead to reduced dependency in economic and political relations. If information were viewed as power, its redistribution could be viewed as a redistribution of power. Barbados stated that 'FAO publications are usually of great significance and value to the underdeveloped countries of the world, particularly those countries which do not have the technical and financial resources to undertake the reviews and surveys which are necessary in planning agricultural development'.¹

STATISTICAL INFORMATION

The collection and dissemination of statistics has been one of FAO's most valuable contributions to all its member states.² Only the U.S.D.A. gathered and analysed statistics in food and agriculture on a comparable scale. It and other institutes cooperated with FAO in its statistical work. All states and international organizations utilized FAO statistics to different degrees, including developed countries such as Canada, Great Britain and the Federal Republic of Germany. Other UN agencies and international organizations exchanged data with FAO, which provided the EU and the Organization for Economic Cooperation and Development (OECD) with data for developing countries. OECD in turn provided food balance sheets for developed countries, as well as data on international assistance flows, while the EU provided data for Europe to FAO. UNCTAD utilized FAO's statistics on agricultural trade and production. The World Bank

1. L.H. Smith [Statement] in *Verbatim Records of Commission II of the FAO Conference, Eighteenth Session, November 1975* (Rome, 1976), p. 33.

2. U.S., *U.S. Participation in the U.N.: Report by the President to the Congress for the Year 1974* (Washington, D.C., U.S.G.P.O., 1975), p. 295.

also did considerable work in statistical analysis. Its statistics with regard to food and agriculture could be much more detailed than those of FAO for those regions where it loaned money. FAO provided the World Bank with data in the areas of production, trade, producer prices and food balance sheets, while the Bank gave socio-economic indicators, national accounts and debt tables.

Both FAO and U.S.D.A. mainly gathered secondary data from national sources, and they relied on national governments to improve their own data. An international organization could, however, arrange for uniformity of methods and urge its member governments to improve their faulty statistical information more readily than another government.¹ Bilateral donors, however, had leverage where aid was involved. Both FAO and the USAID have provided technical assistance to countries to help them improve their data.

Both FAO and U.S.D.A. have computerized data systems on production, trade, and other agricultural statistics. While the U.S.D.A. and FAO cooperated in statistical work and utilized each other's statistics, the U.S.D.A. pointed out two major weaknesses of FAO statistics. FAO official statistics were not always the best source of information. Moreover, the time lag inherent in FAO publications made the information less timely than that collected by American agricultural attachés and other sources.² The data systems of these two agencies formed the main source of international data for researchers and policymakers attempting to formulate solutions to global food and agricultural problems. The data of the two

1. Asher Hobson, *The International Institute of Agriculture: Thesis* (Berkeley, California, University of California Press, 1931), p. 130.

2. U.S. General Accounting Office, *The Agricultural Attaché Overseas, What He Does and How He Can Be More Effective for the United States*, (Washington, D.C., 1975), p. 45.

systems varied as different methods were used in data collection, the reference periods followed and presentation. FAO followed the calendar year for production and trade statistics while the U.S.D.A.'s year was related to national harvests.

Data divergences may also be explained by modifications of the data when they were regarded as being unreliable. Most divergences occurred with regard to developing countries. The U.S.D.A. undertook more modification of data than FAO.¹ The FAO statistical system collected information on a regular basis from all its member governments and also other countries such as the USSR which made its annual statistical yearbook available to FAO upon request. The U.S. system covered fewer countries and commodities and emphasized those that were important to U.S. trade. Although it reported on only 80 percent of the number of countries covered by FAO for production and area of cereals, its world totals were similar. The additional number of countries on which FAO reported produced a negligible portion of the world's cereal staples. For non-cereal staple food crops, the U.S.D.A. covered only half as many countries as FAO and reported on production only. It was well known that, in the case of developing countries, figures on non-cereal food crops were often of lower quality.

The International Food Policy Research Institute (IFPRI) study concluded FAO and USDA should do more to reconcile their data as they formed the basic source of international agricultural statistics.² It recommended that developing

1. L.A. Paulino and S.S. Tseng, *A Comparative Study of FAO and U.S.D.A. Data on Production, Area and Trade of Major Food Staples* (Washington, D.C., International Food Policy Research Institute, 1980), p. 9.

2. Paulino and Tseng, *A Comparative Study of FAO and U.S.D.A. Data on Production, Area and Trade of Major Food Staples*, pp. 46-47.

countries undertake to improve their national agricultural statistics. Donor agencies should not only provide more assistance to poor countries facing resource constraints, but also coordinate their activities for a more systematic approach to statistical development in nation states.

FAO and other donor agencies have been involved in the development of agricultural statistics for decades. In spite of this, basic data remained one of the weakest areas in agricultural development in most developing countries, although India has made tremendous strides in statistical development, providing 10-15 percent of FAO statistical experts in 1985.

Many national authorities in developing countries failed to comprehend that statistics are essential to agricultural planning and decision-making. They often failed to accord sufficient priority to statistical development with the result being insufficient financial resources and staff were allocated for such purposes.¹ The inadequacy of statistics has been a serious impediment to management in all sectors of most African economies. Statistics have in turn been neglected in policy-making because of their low quality and lack of timeliness.² Policy analysts and decision-makers have failed to communicate their specific information requirements to statisticians. It is common knowledge that African decision-makers have often provided guesses when statistics have been required to obtain aid.

FAO inherited the statistical work of the IIA and expanded and improved upon its statistical base and methods. Since the early 1970s, FAO has been

1. FAO, *Review of the Regular Programme 1980-81* (Rome, 1981), p. 265.

2. World Food Council, *Summary Report and Conclusions of the Workshop on Statistics in Support of African Food Strategies and Policies, Brussels, 13-16 May, 1986*, pp. 1-6.

developing an integrated and computerized data system with statistics dating back to 1961. While this already comprised the largest data bank on food and agriculture in existence, FAO also had specialized data banks such as those on seeds and fertilizers. Its data banks were utilized to produce FAO's major publications such as its statistical yearbooks and food balance sheets. The food balance sheets establish a link between supply and utilization of food commodities in each country, thus reflecting the food situation prevailing during a specified reference period. The statistical FAO annuals were published in Spanish, French and English and disseminated globally. They included the following: the *FAO Trade Yearbook*, the *FAO Production Yearbook*, the *Fertilizer Yearbook*, the *Animal Health Yearbook*, the *Yearbook of Forest Products* and the *FAO Commodity Review and Outlook*, and the yearbooks of fishery statistics. The same information was available on magnetic tapes. In fisheries and forestry, FAO was the only organization maintaining statistical information at the global level.¹ Even the U.S. would not have had access to much of this information, particularly in fisheries and fertilizer. The U.S.D.A. relied on FAO statistics to compile its annual report, the *World Fertilizer Situation*. FAO's data were utilized for its projections on fertilizer production and consumption, as well as to determine the pricing of fertilizer components.² Developing countries were also increasingly exporting fertilizers.

The FAO Commodity Review and Outlook highlighted world market developments for eighty major agricultural commodities, pointing out events

1. FAO, *Review of the Regular Programme 1980-81*, p. 249-252.

2. [U.S.D.A.] *U.S. Background Briefings on FAO*.

affecting developing countries both as importers and exporters. Developed countries utilized this document more than developing countries as they were more geared to use of information for analysis. While the information was historical and too dated for day-to-day trade, it was used for marketing purposes mainly by developed countries. Multinationals handled much of the trade of poor countries, but these nations utilized this information to support their positions during multilateral trade talks at GATT. Some Third World countries had only one delegate at these trade talks while the U.S. might send about two dozen well-briefed delegates.

In spite of the fact that FAO data have been computerized since the early 1970s, online access has been available to users inside FAO only since 1983. Extension to external users was under study.¹ FAO data had also become the basis for many of its own studies and were utilized in its Field Programmes.

Like FAO, WHO, ILO and UNESCO have also published considerably more statistical information than some smaller UN agencies such as the World Meteorological Organization (WMO). UNESCO's most important statistical publication has been its Statistical Yearbook. It had an Institute for Statistics in Montreal, Canada, which produced statistical publications.

PUBLICATIONS

Other than statistical documents, most of FAO's publications have been technical publications targeted at government officials and other technicians and

1. E.K. Samaha, *FAO's Contribution to a Better Flow of Scientific and Technical Information for Agricultural Development* (Rome, FAO), 8 pp.

specialists. A limited amount of printed information is produced for the creation of public awareness, particularly non-governmental organizations and individuals involved in mobilizing donors for FAO. The main examples were the periodicals *Ceres* and *Ideas and Action*. The *World Food Report* published annually since 1983 was a much more interesting and informative document than the *FAO in* series of the previous decade which was a mere catalogue of FAO's activities in particular years.

In 1967, the limited amount of documentation issued by the organization particularly with regard to training was viewed with regret by governments. As the budget increased, so did the quantity of publications. There was an explosion of technological information to transfer. As a result by 1973 and 1975, governments requested a reduction in publications, especially those of an ephemeral nature. As in all large bureaucracies, the quality of FAO's publications has varied. Given its global access to expertise and its broad influence in that its documents were utilized in all countries, it should have attempted to publish only documents of high quality. While most of its priced publications were of reasonable quality, many of the white cover documents were of average and even poor quality. These however were published in limited quantities and usually were not widely distributed. FAO could have been more selective in what it published and attached greater importance to targeting documents to the appropriate readership.

The recent emphasis on development-oriented material required that in addition to government officials, academic institutions and specialists, FAO

publications should reach the wide audience at the 'grassroots' level (extension level) they were actually intended to serve.¹

With increased emphasis on reaching the small farmers and the poor, as general development policy, FAO as well as WHO and ILO have been under pressure to move away from documents of an academic nature and produce more training material at the grassroots and intermediate levels. It is questionable to what degree an international organization should be involved in publishing information for extension workers and farmers within countries.² Such information as it can issue must be adapted by competent professionals within nations to meet ecological, political, cultural, and other local needs such as languages. Even national governments experienced difficulties in producing information suitable for their extension services and farmers. Education levels of extension workers and farmers also varied between countries. Many farmers in many countries were illiterate. Hence audiovisual materials such as filmstrips and videocassettes were often more appropriate for international use in field operations.

What was however practical was to adapt and distribute or at least make available non-academic materials received at headquarters from field projects in countries when these were applicable in other countries. This FAO began to do in agriculture, forestry and fisheries.³ Technical reports from field projects have never been published and were until the 1980s not even catalogued. Most that

1. FAO, *Review of the Regular Programme 1978-79* (Rome, 1979), p. 99.

2. Asher Hobson, *International Institute of Agriculture*, p. 124.

3. FAO, *Grass-Roots and Intermediate-Level Training Materials*, vol. 2 (Rome, 1986).

were made available to the library were catalogued and incorporated in FAO's bibliographical database. These reports were available on microfiche along with FAO's main publications produced under the Regular Programme. Much of this information was not available elsewhere but most professionals did not know it existed. Terminal reports of projects usually remained classified as countries failed to inform the FAO library to declassify them. Only the World Bank among the other aid organizations distributed agricultural documentation globally. Its publications were, however, related to its lending activities, and hence it published primarily economic and policy documents. While FAO also published some policy and economic documents, its publications have been primarily technical. It published those documents which governments need to improve their agricultural development and nutrition levels of its populations. Some of these documents, though essential, would not have been considered economically viable by commercial publishers and therefore not published.

A limited amount of documentation was printed by FAO for its meetings as discussed in the next chapter. A few of FAO's documents were being utilized as textbooks and reference books not only in developing countries such as Argentina, India, Chile and Korea, but also in developed countries such as Belgium, Italy, the United Kingdom and the U.S.¹ The Katholieke Universitet, Leuven, Belgium and the Universita Italiana per Stranieri used the entire series of Irrigation and Drainage Papers for training purposes. While FAO's record of its documents utilized as academic texts is incomplete, there was no doubt that further use could be made of them for training purposes, particularly in

1. FAO, *Internal Document*, 10 pp.

developing countries. Some of FAO's publications were used by other international institutes and in many countries for other research both applied and fundamental. The impact on national and international policies and decisions of these publications could not be measured. Though inconspicuous and unspectacular, it was, however, substantive and could be substantial.

Some of the publications were the products of global studies that FAO was in the best position to undertake. Even if the U.S. or any other single country conducted such studies, they would not attract worldwide attention as the studies done by major intergovernmental organizations did.¹ FAO's study *Agriculture Towards 2000* with its various scenarios as to the potential development of agriculture was the source of much greater debate than the American study *Overcoming World Hunger: The Challenge Ahead* published just before the FAO study. This study furthermore focused on the relationships of the U.S. with developing countries. FAO's five World Food Surveys published from 1946 to 1985 which estimate per caput dietary energy supplies for countries, have been increasingly refined in an attempt to estimate the number of malnourished within countries and globally. A Soil Map of the World was produced over a period of 17 years in cooperation with UNESCO, as discussed in Chapter 6.

The technical series published on tropical forests as a result of the FAO/UNEP project on Tropical Forest Cover Assessment provided the first reliable assessment of tropical forest resources. Previous studies conducted by various institutions have been unscientific.

1. *United States Objectives in FAO* (Washington, D.C., 1970), p. 9.

WHO, UNESCO, ILO, WMO and other agencies have also published documents useful for academic and research purposes. They have produced many analyses which have been instrumental in moving research forward.

INFORMATION REFERENCE SYSTEMS

Of increasing importance were FAO's information reference services. Its *International Information System for Agricultural Sciences and Technology* (*AGRIS*) made possible the worldwide exchange of agricultural information. No nation alone could inventory the mass volumes of agricultural information which has been produced globally. *AGRIS* was established in 1975 primarily because of the encouragement of the British and Americans.¹ It was developed to complement the U.S.D.A.'s *AGRICOLA* which indexes and abstracts journals in the fields of nutrition, agriculture and ecology and other topics. Worldwide decentralization was to facilitate local processing of local information in most countries, allowing *AGRICOLA* to focus on American publications. The U.S. system, however, continued to index some foreign publications while encouraging *AGRIS*.

National centres in developing countries supplied the main database with information produced in the country and retrieved from the system all data needed by users within the country. *AGRIS* stimulated exchange of information within countries as well as between nation states. With regard to developing countries, the problem of access to documents remained for financial and procedural reasons

1. E.B. Haas and J.G. Ruggie, 'What Message in the Medium of Information Systems', p. 198; and FAO, *Seminar on AGRIS and International Cooperation for the Exchange of Scientific and Technical Information, Rome, 1 June 1984*, pp. 33-59.

as they could not afford to pay for minimum service charges such as photocopying which may involve foreign exchange.¹ The charge for a photocopy of a ten-page research article was the equivalent of a day's salary of a professional librarian in some nations. Since decisions to accept abstracts remained the option of member countries, the quality of information could be questioned. It was, however, too expensive to arrange the system in any other manner.

The major outputs of the system were a monthly bibliography in printed form, *Agrindex*, also available on magnetic tape. Special bibliographies existed for countries and subjects. A similar system has been operating for agricultural research since 1971. The *Current Agricultural Research Information System* (*CARIS*) was based in Rome.

In 1987, 90 national centres were participating in *CARIS* while 127 countries were cooperating with the *AGRIS* system. Not only had FAO planted the seed by encouraging nations to join the information systems but it helped to mobilize donor support for such activities as training documentalists and providing computers. Over 2,000 documentalists and thousands of users have received training and instruction in the use of *AGRIS*. The UNDP and UN Financing System for Science and Technology for Development have supported both systems. The International Development Research Center of Canada (IDRC) subsidized the development of *AGRIS* in Latin America and Southeast Asia and *CARIS* centres in Southeast Asia, Egypt and Southern Africa in a variety of ways from training to computers.

1. FAO, *Document Delivery – Principles for a Cooperative Solution, Fourth Technical Consultation of AGRIS Participating Centres, Rome, 28 May – 1 June 1984.*

The developing countries had a great deal to gain by using these systems as they provided them with access at a minimum charge to much of agricultural information in existence. If they used these systems properly, the information could have enabled them to strengthen their national agricultural research systems and lead to other concrete decisions and action programmes.¹ The information system for fisheries is discussed in the chapter on fisheries.

Participation in *AGRIS* and *CARIS* has not only enabled countries to develop their own information system, but has also resulted in increased regional cooperation. Regional networks such as *AGRIASIA* for Southeast Asia and *AGRINTER* for Latin America were fostered for purposes of technical cooperation among developing countries. Such networks maximized resources for processing and training while catering to linguistic and other local requirements. Only an intergovernmental organization can foster regional cooperation in such a manner that all its member states can participate regardless of diplomatic relations. *EURAGRIS* allows for regional cooperation in the EU, while *AGRIS* allows for cooperation between countries in Eastern and Western Europe.

While FAO can provide the seed and the political basis for such documentation systems, it takes the financial resources of funding agencies and bilateral aid such as IDRC to make them a reality.

Other UN agencies had different information systems. For example, WHO had the World Health Survey and also the Health Metrics Network which was

1. FAO, *Third Technical Consultation of CARIS Participating Centres, Rome, Italy, 7-9 October 1985; Report and Recommendations; and Address of the Director-General to the Seminar on AGRIS and International Cooperation for the Exchange of Scientific and Technical Information, Rome, 1 June, 1984.*

strengthening and aligning health information systems around the world.¹ UNESCO had United Nations International Scientific Information System (UNISIST), Computerized Documentation System - Integrated Set for Information Systems (CDS/ISIS) and International Comparative Study on the Management, Productivity, and Effectiveness of Research Teams and Institutions (ICSOPRU).²

CONCLUSION

As the world's most comprehensive information centre for food and agriculture, FAO has made a valuable contribution to all its member states. By 1985, FAO had been accumulating, analyzing, and disseminating information with regard to food and agriculture, fisheries and forestry for forty years. As an intergovernmental body, it has freed a great deal of information from vested state interests and made it available to all governments. FAO more than any other international organization assured that sovereign states or private firms can no longer be dominant in the exchange of international information in food and agriculture. The U.S. was the only state which collected and analyzed information on a comparable scale but did not disseminate its information globally. Moreover, the U.S. and other developed states collected and analyzed information related to their own commercial and political interests. Only FAO collected and analyzed information systematically and on a continuous basis from its member states on food and agriculture, and disseminated the results globally.

1. <http://www.who.int/healthinfo/en/>

2. Jens Boel, UNESCO, e-mail of March 27, 2007.

While other international organizations also collected information on crops, FAO remained the most comprehensive centre on crop production. FAO was the only institution conducting global international fisheries and forestry studies and data services. It had also undertaken global and regional studies in various areas such as soils and tropical forests, and nutrition, for which it had better access to data and expertise because it was a global intergovernmental body. Some of the information produced by FAO was not available elsewhere or easily accessible, if available. Only the World Bank collected and disseminated information on any comparable scale. Its work in information has been related to its lending activities and was begun decades later. While the Bank's publications were primarily economic and policy documents, FAO published mainly technical documents. FAO also published a number of important economic documents and policy papers.

While most countries had access to much of the technical information produced by the FAO, it was the clients in Western industrialized nations which utilized the information most as they are more information oriented. Approximately 75 percent of FAO documents were sold in a few Western countries. Most people in developed countries who were familiar with FAO's work acquired this knowledge through use of its publications. FAO made information available cheaply and disseminated it globally. It published information which commercial publishers would not bother to produce, because it would not be considered commercially viable. Unfortunately, most people in all

countries who would have utilized the information often did not know it existed.

FAO and governments must address this problem. Computers could help.

Nevertheless, some FAO documents were heavily utilized in many countries, stimulating research and practical action. FAO's work was not confined to collection and dissemination of information. It assisted developing countries in improving their inadequate information systems and in standardizing information globally, creating common ground for increased international cooperation. It was doubtful whether any other external means could duplicate the perceived legitimacy of UN systems with regard to prodding states to improve their information and to make it available for broad dissemination.

International information systems may upgrade the quality or sophistication of decision making and policy throughout the world, by providing greater uniformity of access to specialized information that some or perhaps many decision-makers previously lacked. The present state of knowledge about information was such that no full-scale investigation of any of its possible effects on international or national policy and politics was possible. While inconspicuous and unspectacular, its contribution was substantive and could on occasions be substantial.

Information from international organizations made possible some transfer of information from North to South whether in the realm of basic research or more politicized information concerning trade, technology or capital. It also stimulated the independent production of agricultural information by the South itself. Information exchange sought to compensate for the lack of appropriate resources in developing countries by enhancing their ability to attain food security.

Access to knowledge could lead to reduced dependency in economic and political relations. If information were viewed as power, its redistribution could be viewed as a redistribution of power. *AGRIS* and *CARIS* can make a major contribution here in the future as access problems were solved and they were more widely used.

FAO, however, had the potential for a much greater contribution if the constraints on its work were minimized. Governments objected to FAO publishing any information they did not want publicized. They sometimes concealed information from FAO or provided misleading information where vested interests and prestige were concerned. A much greater problem, however, was the inadequate information flows within developing countries. Often the data were incomplete and unreliable, while in many areas particularly in Africa there was no information. This was particularly true in the area of statistics in developing countries. FAO's error with regard to estimating the food aid needs during the 1984 drought in Ethiopia demonstrated dramatically what could happen when an international organization adopted erroneous data and published the information for governments to act upon. As a result, the donors provided the necessary aid much later and many people died. Unfortunately, the many in countries whose lives were probably saved by the reports of FAO's information and early warning system to donors of impending famine cannot be ascertained.

CHAPTER 4

FAO AS A FORUM

The principal primary sources relied on in the following pages were:

1. Lamartine Yates, P., *So Bold an Aim: Ten Years of International Cooperation Toward Freedom from Want*, FAO, 1955.
2. Raison, Timothy [Statement] in *Verbatim Records of the Plenary Meetings of the FAO Conference, Twenty-Second Session, November 1983*, FAO, Rome [1984].
3. Whelan, Eugene [Statement] in *Verbatim Records of the Plenary Meetings of the FAO Conference, Twenty-Second Session, Rome, 5-23 November 1983*, FAO, Rome [1984].
4. FAO, *The Role of Women in Rural Development, FAO Conference, Eighteenth Session, 8-27 November 1975*, Rome, 1975.
5. *Report of the Conference of FAO, Thirteenth Session, Rome, 20 November – 9 December 1965*, FAO, Rome, 1966.
6. Phiri, B.E. [Statement] in *Verbatim Records of Meetings of Commission II of the FAO Conference, Twenty-First Session, Rome, 7-26 November 1981*, FAO, Rome [1982].
7. Janjua, M.F. [Statement] in *Verbatim Records of Plenary Meetings of the FAO Conference, Twenty-First Session, Rome, 7-26 November, 1981*, FAO, Rome, 1982.
8. *Report of the Seventeenth FAO Regional Conference for Asia and the Pacific, Islamabad, 24 April – 3 May 1984*, FAO, Rome, 1985.
9. FAO, *Energy Cropping Versus Food Production: FAO Expert Consultation, Rome, 2-6 June, 1980*, FAO Agricultural Services Bulletin, 46, Rome, 1981.
10. FAO and UNEP, *Food Loss Prevention in Perishable Crops*, based on an Expert Consultation Jointly Organized by FAO and UNEP, FAO, Rome, 1981.

INTRODUCTION

Developed countries regarded provision of fora as the most important function that intergovernmental organizations such as FAO could perform. Developing countries sometimes did not have the appropriate people to send to technical meetings, or to brief their delegates to governing bodies. Hence technical assistance projects could be more valuable to them. Technology was also

transferred via these meetings and the documents discussed at them.

Implementation could occur on the basis of the documents alone, as exemplified by Canada's planning of fertilizer sales, which is discussed later in this chapter.

While the long-term effects of meetings were difficult to measure, they can often result in substantive contributions in both developed and developing countries. Intergovernmental meetings facilitated technical and economic cooperation in agriculture between countries which did not even have diplomatic relations. This could not be accomplished by bilateral diplomacy. These fora allowed the United States and other developed countries to help poor people in North Korea and other countries with which they did not have good relations. To what degree did poor countries utilize these fora?

Improved relations could result from interactions on such fora, particularly at regional meetings when senior government officials met. Even where hostilities existed, cooperative regional action programmes have been finalized on such fora in such areas as fisheries, animal diseases and desert locusts. Regional meetings had a particular contribution to make as states in regions often had similar ecologies, cultures, languages, problems and potentials. Hence there was more scope for international cooperation. In addition, distances were often not as far. FAO had not only organized regional commissions in the areas mentioned but also in agricultural statistics and planning. Some commissions such as the one on fertilizer are open to all FAO member states.

Intergovernmental meetings provided governments with an opportunity to promote their economic and political interests with regard to food and agriculture

in a global public forum which could not be replaced by bilateral diplomacy. Developing countries had most to gain in view of the fact that FAO had increasingly begun to reflect their needs as they formed the majority and most were primarily agricultural economies. On the other hand, developed nations such as the United States utilized them to acquire information regarding trade and to promote their development philosophy such as the free market economy.

Many issues discussed at FAO fora such as soil conservation and rural women have never been adequately implemented in any country. The main problem remained that the decisions, resolutions and recommendations of FAO governing bodies were not binding on its member nations as they were in the European Commission.

Meetings could also be made more useful if their results were more widely communicated within countries. In most countries, there were no news reports about these deliberations except by the international staff itself.¹

AD HOC CONFERENCES

The two most important meetings FAO had participated in were the World Food Conference and the WCARRD. These were not regular FAO meetings but global conferences called to address special issues with wide-ranging results as discussed in Chapter 2. The FAO World Conference on Fisheries Management and Development was also in that category.

1. Robert R. Spitzer, *No Need for Hunger; How the United States Can Help the World's Hungry to Help Themselves* (Donville, Ill., Interstate Printers & Publishers, Inc. 1981), p. 103.

FAO MEETINGS IN GENERAL

Traditionally, international organizations have provided governments with fora to discuss, negotiate and cooperate on issues of common concern.¹ Most academic studies conducted during the 1970s continued to portray the United Nations as an arena or forum. Ralph Phillips, an American citizen closely associated with the organization since its early days and who retired as Deputy Director-General of FAO in 1981, also stated that the provision of fora was probably the most important function that an intergovernmental organization such as FAO could perform.

When asked how the United States benefited from participation in FAO, former Assistant Secretary of Agriculture, Richard Bell stated to a Senate subcommittee that the foremost benefit was the fora. Through them, the United States obtained a great deal of useful information, developed better understanding or agreement with other countries on problems of common concern and contributed to improved international relations generally.² They were well worth the money the United States spent on preparation and attending them.

The same view was also expressed by Samuel W. Lewis, former Assistant Secretary of State for International Organization Affairs, at the same hearing. FAO fora, with increased developing country membership, provided for a balanced consideration of problems that had, too often in the past, been considered in isolation. The incurring interdependence of the global economy

1. Clive Archer, *International Organizations* (London, George Allen & Unwin, 1983), p. 136.
2. *U.S. Participation in the Food and Agriculture Organization of the United Nations; Hearing Before the Select Committee on Nutrition and Human Needs of the United States Senate, 94 Congress 2nd Session, March 4-5, 1976* (Washington, D.C. U.S.G.P.O., 1976), P.105.

made such a dialogue indispensable. FAO meetings, particularly technical meetings or seminars in developing countries, have provided many opportunities for exerting limited state influence on a large variety of agricultural matters of interest to it.¹ However, this was the view of people from developed countries. Was this their view because they did not receive technical assistance? Most developing countries felt that technical assistance was more important.

As long as representatives of nation states talked to each other, there was reasonable hope of reaching useful, workable understandings and developing cooperation for the solutions to problems. They provided representatives of governments and technicians of countries which did not have diplomatic relations or good relations with an opportunity to meet, exchange ideas and negotiate solutions to common problems as demonstrated in the case studies on fisheries and animal health as described in their respective chapters in this thesis. On these fora, a certain process of socialization took place in which state and non-state actors learned to consider not just their own national interests but the requirements of others in the food system. As a result, authoritative decisions were produced that could usually be implemented, although this was not true in every case.²

These meetings offered governments a chance to advance their view points and interests in a global public forum, which could not be replaced by bilateral diplomacy. FAO meetings also provided governments with an opportunity to promote their economic and political interests with regard to food and agriculture.

1. *U.S. Participation in the Food and Agriculture Organization of the United Nations*, pp.118-119.
2. Archer, *International Organizations*, p. 152.

Developing countries used them as another forum during the 1970s to exert pressure for the NIEO. They were predominantly agricultural economies and their main source of foreign exchange was frequently that earned by marketing a few agricultural commodities. Tanzania, for example, marketed coffee, tea, cotton and sisal. Some also had other raw materials such as mineral resources. Developing countries were interested in receiving the science and technology that the industrialized countries wished to transfer. The United States, the world's largest importer and exporter of food and agricultural commodities used FAO meetings to achieve its objectives – not only on international food and agricultural policy but also on development policy in general.¹ Furthermore, business at meetings is not confined to the formal meetings and their agendas. While all these contributions might be intangible, they could be substantive and even result in major accomplishments.

If all governments could benefit appreciably from these meetings, the calibre of the people representing them became important. P. Lamartine Yates, a former FAO staff member, emphasized the fact that governments could strengthen FAO by seeing to it that they were effectively represented at the meetings of committees, the Council and the Conference. He argued that,

‘nothing reflects the lack of interest of a government more than sending second class officers to represent themselves at meetings of an intergovernmental body. The work is work by governments, for governments and its quality will depend on the quality of the men sent by governments to carry it out. For expert meetings, experts, not diplomats, are in order: for the FAO Council, the administrative head of at least one government department and, on occasion of special debates, even a minister; for the Conference,

1. U.S.D.A., *U.S. Background Briefings on Individual International Organizations, The FAO*, p.2.

always a minister (and preferably the minister for agriculture) plus one or two department heads and appropriate advisors'.¹

Judged by these criteria, governments have been adequately represented at both Conference and Council meetings with regard to rank. The standard of representation to Conference and Council meetings included diplomats and senior government officials with such ranks as deputy ministers. Ministers usually led delegations to the Conference. The quality of the civil servants was difficult to judge: it varied and depended on how well they had been briefed by other civil servants who were specialists. As at other governing bodies of United Nations organizations, officials often intervened not only without instructions from capitals but without having read, let alone considered the documents.² There were too many documents to read.

Some officials who attended the FAO Conference and Council meetings had long years of experience on the FAO fora. The following include those I have interviewed on several occasions:

M.S. Swaminathan, a former Minister and Secretary in India, then Director-General of the International Rice Research Institute and Independent Chairman of the FAO Council from 1981-1985, played a role in FAO affairs for decades and participated in FAO conferences from 1973 -1985.

Frank Shefrin, who represented Canada at meetings of FAO's governing bodies ever since the founding Conference at Quebec as a senior civil servant until his retirement in 1980, continued to attend FAO conferences as an observer for the International Federation of Agricultural Producers. Shefrin attended the Quebec Conference in 1945 and has participated in all the Conferences held over the next forty years.

2. P. Lamartine Yates, *So Bold an Aim Ten Years of International Cooperation Toward Freedom from Want* (Rome, FAO, 1955), p. 152.

1. *Official Report of the United States Delegation to the Twentieth Session of the FAO Conference, Rome, Italy, November 10-29, 1979*, P.19.

Wolfgang Grabisch, Head of Division, International Agricultural Organization, Federal Ministry of Food, Agriculture and Forestry, Western Germany had been associated with FAO affairs for over 25 years.

Mohamed Dessouki, Administrator, Foreign Agricultural Relations and Adel El Sarky, Director-General, International Organizations Department from the Ministry of Agriculture in Cairo, Egypt, both had over thirty years of experience in 1985.

There were a number of other participants with as much or somewhat less experience.

J.M. Scouler, who was responsible for FAO affairs in the Overseas Development Administration in the United Kingdom, was involved with FAO affairs for ten years.

Continuity of representation could result in great effectiveness but could sometimes be a negative factor. As the United States Senate report argued:

‘Most importantly, having a permanent representative to the FAO Council means the United States runs the risk of having this individual co-opted by the FAO Secretariat. The value of bringing in new ideas and new perspectives on FAO operations and of avoiding a stagnant and uncritical representation is preferable to a close relationship between a U.S. representative to the FAO Council and the FAO Secretariat’.¹

This is true of all countries, as many of these Permanent Representatives to FAO were often seeking jobs or other favours at FAO. Hence they hesitate to say anything the FAO Secretariat might regard as being critical. The situation was simply a greater problem with officials from developing countries, who have more to gain by the high salaries and fringe benefits.

It was more difficult for developing countries than developed countries to had properly briefed representatives at the many meetings.² Most developed countries

1. U.S. Select Committee on Nutrition and Human Needs, the United States, *The FAO and World Food Politics: U.S. Relations with an International Food Organization* (Washington D.C., U.S.G.P.O., 1976), p. 44.

2. Douglas Williams, *The Specialized Agencies and the United Nations: The System in Crisis* (New York, St. Martins Press, 1987), p.120.

had interdepartmental arrangements that ensure briefings and consistent analysis of problems to ensure international expression of policies. The developed countries also had better group arrangements for considering many issues raised on international fora. Foremost was the OECD, which dealt with economic issues; then the Geneva Group comprised of industrialized countries and concerned with budgeting questions. The EC countries expressed a joint view on issues raised in international fora, which were within the Community competence. The existence of these institutions, especially OECD, ensured a better analysis of many of the issues and a more consistent view on them than would otherwise be possible.

The real difficulties arose in the meetings requiring experts, including some meetings of committees and commissions as the governments invariably sent civil servants who were seldom the most qualified technicians or were often not experts at all. The United States has the largest pool of technically skilled people in the world. In spite of this, at the FAO governing body and expert group meetings, only once in two years was the United States represented by a person from outside the government, a faculty member at Louisiana State University.¹ During 1974 and 1975, the two years under consideration, the United States participated in 60 meetings each year. Some of these meetings required civil servants as they involved decisions on behalf of the government. Civil servants could also be outstanding technicians but generally they were not the best experts in technical fields.

1. U.S. Select Committee on Nutrition and Human Needs, *The United States, the FAO and World Food Politics: U.S. Relations with an International Food Organization*, pp. 42-43.

Great Britain felt technical meetings were an area of FAO work from which it continued to benefit most. At the 1983 FAO Conference, it urged member states to provide better representation at technical meetings (including the Committees on Agriculture, Fisheries and Forestry).¹ Some developing countries did not, of course, have the necessary qualified people to attend these meetings; sometimes skilled people lacked language facility. There was no simultaneous translation at technical meetings and they were usually held in one official language as this was cheaper, although this was not normally the case for technical meetings held in Rome or other major centres.

Even if the people who attended the meetings were competent, most statements any government might not approve of were deleted from documents, as in other United Nations organizations but since FAO was a more technical agency, there were fewer politically sensitive issues than in UNESCO, ILO or the International Atomic Energy Agency (IAEA). Only the United Nations University had academic freedom as it was financed from an endowment fund and its governing board, the Council, was comprised of eminent scholars, not governments.²

FAO GOVERNING BODIES

While the main governing bodies of FAO have continued to be its Conference and the Council and its subsidiary bodies, actors and issues on these fora have

1. Timothy Raison [Statement] in *Verbatim Records of the Plenary of the FAO Conference, Twenty-second Session, Rome, November 5-23, 1983*, (Rome, 1984), p. 145

2. I.C.V. Narasimhan, *History of the United Nations University: A Personal Perspective* (Tokyo, the United Nations University, 1994), pp. 146-149.

reflected the fact that FAO's membership has nearly quadrupled over the forty years since its foundation up until 1985. This tremendous increase in developing country membership has resulted not only in a shift in voting power but in the twenty years between 1965 and 1985, the discussions had increasingly begun to reflect the needs of the developing countries at their various stages of development. Many developing country delegates from such countries as India, Egypt and Malaysia had become highly articulate with regard to their nation's interests and Third World representatives usually made most of the interventions. While this had been a common development throughout the UN system, at UNDP Governing Council sessions, the major donors continued to make most of the interventions. In its first two decades, FAO and its governing bodies were also dominated by the major donors.

All member governments had one vote in the Conference fora and were equally powerful. Behind the scenes, however, the developed countries exerted pressure on governments and on the FAO Secretariat especially with regard to the budget. Small nations did not have any influence in a world dominated by great powers but they could make themselves felt in international organizations, where they could speak and vote as equal members. According to Faaland and Norbye, the Scandinavian countries wanted to take decisions on UN policies in the Third World seriously not merely to assist the developing countries but to build up the

image, strength and authority of the UN.¹ The Scandinavian countries sometimes voted with the developing countries on FAO fora and on fora of other agencies.

The conflict between developed and developing countries, which continued on FAO fora, emerged during the 1960s.² The feeling was growing among developing countries that the Organization existed only for their benefit and that they should determine its programme and budget. The developed countries have felt that since they pay most of the budget, they were not only entitled to services from the Organization but should have a substantial say in what it did and the level of the budget.

These attitudes prevailed in ILO, WHO, UNESCO and most other specialized agencies also. Director-General, B.R. Sen in his public statements and programmes of work had stressed the role of FAO in the service of developing countries. At first, the developed countries took a dim view of this development but by 1967, the Americans among others, emphasized that they regarded field work in improving agriculture in less developed countries to be the main business of FAO. There has always been a fundamental consensus on FAO fora that this was the main way to eliminate hunger and malnutrition.

There was, however, a further trend by 1967 by developed and developing countries to polarize sentiments, positions and votes on the basis of a division between developed and the developing countries.³ Such polarization has

1. Just Faaland and O.D. Koht Norbye, 'Interests of Scandinavian countries in Third World Development', in R. Cassen, R. Jolly, J. Sewell and R. Wood, eds, *Rich Country Interest and Third World Development* (London, Croom Helm, 1982), p. 285.

2. *Official Report of the United States Delegation to the Twelfth Session of the FAO Conference, Rome, Italy, 31 October – 5 December, 1963*, p. 79.

3. *Official Report of the United States Delegation to the Fourteenth Session of the FAO Conference, Rome, Italy, 23 October – 23 November 1967*, p. 114.

continued but has, until 1985, been less pronounced at FAO than in some other international organizations such as ILO and UNESCO which were more political.

The 1970s saw an increase of political debates and confrontation at the meetings of FAO governing bodies. By 1969, membership of FAO had risen to 121 countries, most of them developing. It has always been believed that FAO's effectiveness as a technical organization would be maintained only if extraneous political activities were limited. The increased political strength of the developing countries when properly exercised was a positive development. The World Food Conference held in 1974 resulted in even more political activities in FAO governing bodies.¹ The introduction of totally irrelevant issues, such as the Koreans quarrelling and the Panama Canal, has always been discouraged by the Secretariat and developed countries. Director-General Saouma had, from the beginning of his leadership, managed to control politicization at FAO conferences.²

Politicization in this thesis refers to the involvement of agencies in political issues which were beyond the competence and mandate of the organizations. There were not only no resolutions by the Arab states regarding Israel, but there was no mention of the occupied territories on FAO fora during Saouma's regime.

WHO, ILO and UNESCO experienced considerable politicization in debates during the 1970s and early 1980s.³ At WHO a report was endorsed which

1. *Official Report of the United States Delegation to the Eighteenth Session of the FAO Conference, Rome, November 8-27, 1975*, p. 52.

2. *Official Report of the United States Delegation to the Twentieth Session of the FAO Conference, Rome, November 10-29, 1979*, p. 39.

3. Douglas Williams, *The Specialized Agencies and the United Nations: The System in Crisis* (New York, St. Martin's Press, 1987), pp. 50-66.

concluded that nuclear weapons constitute the greatest immediate threat to the health and welfare of mankind. The United States argued that prevention of nuclear conflict was a political issue which had been dealt with in appropriate political bodies and that WHO could not prevent nuclear conflict. The Arab states raising some issues regarding the occupied territories in Israel became a regular feature at WHO's assemblies. For example, one assembly undertook a review of health conditions in the occupied territories. Also, resolutions against South Africa included not only apartheid, but also accusing it of military attacks to destabilize the governments of border states. Voting privileges of South Africa were suspended by WHO in 1964, while it withdrew from UNESCO in 1955 and from ILO in 1966.

The United States was so dissatisfied with its policies and administration that it withdrew from UNESCO in 1984, followed by the withdrawal of the United Kingdom in 1985. Germany and Japan among other Western countries were also dissatisfied but did not withdraw. UNESCO has always been the most political of the UN agencies for its mandate is so broad that the degree to which discussions exceed it is always debatable. Highly controversial were its attempts to introduce a New World Information and Communications Order. Several resolutions which were regarded by Western governments as harmful to the free flow of information were adopted, as were others which could result in state censorship. The United States also sharply reacted to resolutions at UNESCO concerned with archaeology in Jerusalem which attacked Israel.

Although, by 1975, the United States had become dissatisfied with ILO's policies, it was the 1974 ILO Resolution on Israel that led to its withdrawal in 1975. The resolution stated that any occupation of territory was a violation of human and trade union rights and it condemned Israel for violating trade union freedom in its occupied territories. It called on the governing body and the Director-General of ILO to end this violation.

In withdrawing from ILO, the United States expressed dissatisfaction with trends that were interfering with ILO's functioning. These policy issues included the erosion of tripartite representation, selective application of human rights, disregard of due process in examining alleged violations of human rights and increased politicization. There had also been a certain reluctance in the ILO to face up to Soviet and East European abuse of human rights. By 1980, the United States rejoined ILO, as these trends had been sufficiently reversed. Also, secret ballots had been introduced in 1979.

Despite the fact that a resolution on Israel had led to the United States' withdrawal from ILO earlier, the issue of its occupied territories was again raised at an ILO Annual Conference, but defeated. The Conference Committee on Apartheid called for a boycott by member countries of banks operating in South Africa and trade union boycotts against some major foreign investors.

The political approaches common throughout the UN system have, however, continued at FAO since the World Food Conference. The former Minister of Agriculture for Canada, Eugene Whelan, complained to the author that FAO was

far too political to get the programmes you want.¹ He explained that this was not only the G77 and the Secretariat. Developed countries such as the United States also called aside Third World delegates who expressed a view they did not like. Whelan had attended every FAO Conference in a decade with the exception of the 1979 Conference.

The delegates from many Third World countries have, furthermore become highly articulate on all UN fora. It was, therefore, not surprising that the underlying differences between developed and developing countries have continued with the FAO Secretariat usually supporting Third World positions.² There have been differences between the two groups on such subjects as trade; FAO's relationship to UNDP, including the relationships with country representatives; the budget; the TCP and programme evaluation. Developing countries usually wanted more money for agricultural development with as little evaluation as possible. They preferred a sort of pseudo-evaluation which showed their projects and the respective organization in a good light.³ This was generally true, not only within the UN system but also with bilateral agencies.

CONFERENCE

Plenary

The main governing body of FAO was its Conference which met biannually in Rome at FAO headquarters. In addition to being attended by member states and

1. Eugene Whelan, *Interview*, Ottawa, August 6, 1982.

2. *Official Report of the United States Delegation to the Twentieth Session of the FAO Conference, Rome, November 10-29, 1979*, p. 39.

3. Anthony Bottrall, *Information Needs for Evaluating Irrigation System Performance* (Dhaka, Bangladesh, Ford Foundation, 1984), p. 1.

associate members of the Organization, it was also attended by observers from non-member nations, intergovernmental organizations and non-governmental organizations. Each member state was represented by one delegate and had one vote; governments also appointed alternates, associates and advisors to the delegate who may participate in his place. They assigned any duties they chose to these officials. National delegations to the Conference invariably included the permanent representatives to FAO of their respective countries. The Conference reviewed the decisions of the FAO Council and its subsidiary bodies.

Theoretically, and usually in practice, documents debated at the Conference have already been approved and altered by the Council and its standing committees. At the Conference these documents received the seal of approval by the highest decision-making body of FAO.

The Conference approved the Programme of Work and decided on the level of the budget. It admitted new members and decided on the scale of contributions of individual members. In addition to the above, the Plenary elected the Director-General and Council members.

The McDougall Memorial Lecture and other special guest lectures were delivered at FAO plenary sessions by heads of state and other eminent personalities. Most of the time at the Plenary was devoted to general statements by the head of delegations. Delegations from developing countries to the Conference were usually led by their Minister of Agriculture. Sometimes the heads of delegations were Deputy Ministers or Ambassadors of the respective

countries to Italy. Timothy Raison, Minister for Overseas Development, led British delegations to FAO conferences from 1979 until the early 1980s.

These speeches, while usefully commenting on the trends with regard to food and agriculture, contained, as could be expected, unnecessary and time-consuming rhetoric. There was no need for ministers of agriculture to keep telling each other for years that there should be more emphasis on agriculture and rural development and those development strategies should focus more on the poorest. Obviously, they had not been able to influence the more powerful ministries such as Finance and Planning to invest more money in rural areas in their own nations, or they were not very serious about what they said. Agriculture was almost never one of the most powerful ministries in spite of the importance of food for national security and the fact that Third World countries were predominantly agricultural economies exporting cash crops.

In the decade 1975-1985, there was a great deal of concern expressed on FAO fora regarding small-scale farmers. At the 1981 Plenary, M. F. Janua, Minister of Food, Agriculture and Cooperatives discussed the changes of Pakistan's agricultural policies so that 'the fruits of increased production should reach the small farmer'. It was true that Pakistan was implementing those policies. What the Minister did not explain, however, was that a small farm, as defined in Pakistan, comprised 8 hectares, which would be considered a large farm in the rest of the Third World. Small farms were usually smaller than 3 hectares in Asia on the average. More than 90 percent of all tropical farms were less than 5 hectares in size.

The speeches reflected the concern of governments with their prestige, status and image. They stressed their progress and policies that appear enlightened, rather than pointing out errors they have made and how they have overcome difficulties. Their statements provided a few governments such as North Korea with another opportunity to praise their leader Comrade Kim Il Sung. Major donor countries invariably attempted to place their aid flows in the most impressive light.

When it came to the solution to the world's hunger problem, different groups placed responsibility on others for the relative lack of progress. Developing countries pointed to the distortions due to their colonial heritage, to inadequate development assistance, rigid conditions for aid and lack of adjustments in trade. Developed countries claimed that developing countries have not given the necessary priority to increasing food production and internal structural change. International agencies maintained they were doing what they could within the constraints of their resources and demands of member governments. Everyone felt they were doing their best while hundreds of millions remained hungry.

Ministers and heads of delegations should have a forum to discuss the world's food problems. As Eugene Whelan, then Minister of Agriculture for Canada and President of the World Food Council argued in his address to the Plenary in 1983:

'I was listening this morning – if I am not in the audience, I am up in the World Food Council office listening – and someone said, "There shouldn't be speeches made at the FAO". How are we going to tell anybody what we think should be done when the only opportunity we have is here. The commissions are full of bureaucrats. We are ministers; we are responsible for tax payers' money. We have to question; we have to tell; we have to know what is going on. So when they suggested we should not make speeches – I have heard an

FAO person say this the other day, “What do we have all those speeches for?”¹

Statements could, however, be shortened and address definite topics. In the past, they have not been focused and there has been no room for discussion or debate. If the forum were turned into a debate on certain issues, ministers would have to be knowledgeable and articulate. This would also involve restructuring of the Plenary in terms of time as ministers came at different times.

The speeches did make many important substantive points as some of the citations revealed but they got lost in the verbiage of the statements and the massive proceedings of the meetings. Who read the proceedings of the Plenary? At best, very few people as part of their duties. During the twenty years 1965-1985, there have simply been too many long speeches at each session.

Commission I

Commission I dealt with agenda items relating to the major trends and policies in food, agriculture, fisheries and forestry. It reviewed the world food situation in the *State of Food and Agriculture* and took up topics of current interest. In 1965, the Freedom from Hunger Campaign was discussed at length. In 1975, policies and programmes for improving human nutrition were considered as well as the role of women in rural development. The focus on poverty within the United Nations system had some influence on popularizing both these issues. The World Food Conference held in 1974 had also stressed the need for an increase in

1. E.F. Whelan [Statement] in *Verbatim Records of Plenary Meetings of the FAO Conference, Twenty-second Session, Rome, 5-23 November 1983* (Rome, 1984), p. 151.

emphasis on nutrition. Many of the resolutions of the UN World Conference on International Women's Year held in Mexico City in 1975, related to food and agriculture. In 1977, a document on the prevention of food losses was discussed as well as developments in the realm of the sea and their implications for fisheries. At the 1979 FAO Conference, African animal trypanosomiasis was one of the main agenda items. Actions taken in this sector are detailed in the case study on animal health.

These documents invariably contain recommendations as to actions governments should take as well as FAO programme activities and proposals in the respective areas. The recommendations, while fundamental, are extremely broad and usually merely guidelines. For example, the first recommendation of government action suggested with regard to women in rural development states that, since there were wide divergences in the situation of women in various societies and cultures, each country must identify its own priority areas and targets and decide upon its own national strategy.¹ Governments would also be concerned about infringement on national sovereignty by FAO.

Women's participation in decision-making and planning remains minimal in most countries as well as in the UN system. The situation of many rural women in industrialized countries could be described as undesirable and, in certain cases, pathetic. The long hours of hard physical labour they often performed with regard to agricultural production, even during periods of child-bearing in addition to household chores and caring for other children, left room for a great deal of

1. FAO, *The Role of Women in Rural Development, The FAO Conference, Eighteenth Session, 8-27 November 1975*, (Rome, 1975), p. 5.

improvement. The plight of rural women in poor countries needed little elaboration. Their life was one of drudgery both in their roles as housewives and farm workers. In Africa, most of the work with regard to agricultural production continued to be performed by women. FAO has estimated that, in addition to how hard they work, three out of ten rural women in developing countries regularly do not have enough to eat. Furthermore, women make a critical contribution to the nutritional status of all family members.

The recommendations in the document were so general that, with little exception, they might apply to all countries. The adaptive research and laws necessary to implement any one of these recommendations was another matter. In fact, the document stated that there were social structures and attitudes, which perpetuated the situation with regard to the status of rural women. They were based on deeply imbedded social and cultural traditions reflecting the environmental and historical factors and were therefore difficult to change. At least the document was straightforward with regard to social conditions and the degree to which they impeded progress with regard to the situation of rural women. Neither was this unique to developing countries, it is simply that their women were poor and often hungry in addition. Developed country officials were usually not the appropriate people to implement these ideas in their countries or they might simply feel the condition of rural women was not a major problem in their countries and dismiss the issue as one for developing countries.

Even if governments went home and failed to implement policy issues and programmes discussed at these commissions, the FAO Secretariat incorporated

the issues in both its Regular Programme and Field Programme and kept prodding away at governments. Though inconspicuous, a useful contribution was being made.

Commission II

While Commission I dealt with policy issues of direct concern to member governments, all agenda items relating directly to the activities of the Organization were assigned to Commission II. The main document discussed on this forum has been the Programme of Work and Budget. It provided states with an overview of the Director-General's plans, priorities, strategies and budget for the next two years. While the Programme of Work and Budget invariably led to discussion of at least some of its hundreds of elements involving what FAO will do with regard to all aspects of food and agriculture, the main debate here usually involved the level of the budget of the Regular Programme. The Regular Programme was FAO staff, activities and services at headquarters and in the field paid out of the FAO budget as voted on by the Conference. Without money, FAO could not do anything.

Like the other specialised agencies, FAO derived its financial resources from assessed contributions of its member states. They comprised a percentage of the budget of the Conference and were related to a country's ability to pay. Most member states therefore paid less than .01 percent of the budget. The United States paid 25 percent, while the United Kingdom contributed 5.64 percent. The

assessed contributions to FAO are listed in Appendix B. Frequently, they were in arrears.

As in other UN organizations, the developing countries exerted pressure for increased financial resources feeling the proposed levels of increase were often inadequate, while the developed countries, who paid most of the budget, attempted to restrain its growth. Obviously, the developing countries had more to gain from increased resources for FAO than the major donors. There have, however, been occasions when certain developing countries like Brazil have opposed the rate of increase of the budget.

As early as 1965, a number of delegations, while supporting the budget providing for the urgent needs of poor countries, expressed concern regarding the rate of growth of the budget and the hope was expressed by some delegations that in the future, the budget level would be stabilized.¹

During the decade 1975-1985, however, some of the major donor countries, such as the United States, Canada and the United Kingdom, began to oppose the increase of FAO's regular budget.² Governments began to feel that their national low and no-growth budget situations should be reflected in the UN system.

Zambia pointed to one of the major problems when it stated that 'quarrelling with the Secretariat' about the size of the Programme and Budget was wrong as it was drawn up in accordance with requests from developing countries. Developing

1. *Report of the Conference of the FAO, Thirteenth Session, Rome, 20 November – 9 December 1965*, (Rome, FAO, 1966), p. 73.

2. *Official Report of the United States Delegation to the Twentieth Session of the FAO Conference, Rome, Italy, November 10-29, 1979*, p.16; *Official Report of the United States Delegation to the Nineteenth Session of the FAO Conference, Rome, Italy, November 12 – December 1, 1977*, p. 39; *Report of the Conference of the FAO, Twenty-First Session, Rome, 7-25 November 1981* (Rome, FAO, 1981), p. 24.

countries felt that FAO was doing a good job in responding to their requests.

Those who felt that FAO should not be performing certain tasks should inform the respective countries who requested those services; otherwise the Programme would continue to grow.¹

This attempt by a UN organization to service all the needs of its member states was a common problem in the UN system. For example, the Executive Director of UNEP went to his Governing Council to decrease the number of issues his Programme dealt with. Member states were asked to point to selective priority areas. The result was a significant increase, rather than a decrease, in the number of issues UNEP was to deal with.

Matters relating to the Programme of Work and Budget such as the Review of the Field Programmes and the Review of the Regular Programmes are regularly considered in Commission II of the FAO Conference. Selected topics have been dealt with at different Conferences, which could result in various cooperative actions. Relations and cooperation with other United Nations agencies and other international organizations were also dealt with here.

In 1973, the document *Towards a New Strategy for Improving Nutrition* was considered. This Conference agreed to the reorientation of FAO work in the nutrition area to focus on food and nutrition planning as opposed to nutrition interventions. It was recommended that nutrition should be one of the major objectives of FAO projects and that an integrated approach to nutrition problems be promoted between the various technical divisions of FAO and other UN

1. B.E. Phiri [Statement] in *Verbatim Records of Meetings of Commission II of the FAO Conference, Twenty-First Session, 7-26 November, 1981* (Rome, Italy, 1982), p. 143.

agencies. FAO was to assist countries to include nutritional considerations in their agricultural and development plans. This new approach to nutrition, which had been under consideration by UN agencies, was given impetus by the World Food Conference and adopted throughout the UN system. The Food and Nutrition Policy Division of FAO has had some success in incorporating nutritional considerations in FAO projects. Nutrition has remained a major theme at FAO Conferences often manifesting as concern for women, poor fishermen and the landless, as these were the vulnerable groups. These groups have become the main target of FAO projects and programmes. Why did it take until 1973 for the international community to realise this emphasis was necessary? It had already become obvious earlier that the trickle down theory in development did not work.

A World Soil Charter was adopted in 1981 to propose general policies for appropriate use of scarce land resources, a problem in all countries. An International Code of Conduct on the Distribution and Use of Pesticides was finalized and adopted at the 1985 Conference. While the need for soil conservation has been recognized since Hot Springs, even if not implemented, the possibility of widespread use of pesticides in Third World countries has resulted in a more recent recognition for the need to regulate their international marketing and proper use. Western industries had been selling harmful pesticides in the Third World.

Commission III

Commission III met for only a few days to discuss constitutional and administrative matters. FAO's activities must be carried out on a sound legal and constitutional basis, which is consistent with its Basic Texts and its status as an intergovernmental organization in the UN system.

Conclusion

M. F. Janjua, Minister of Food, Agriculture and Cooperatives in Pakistan, summarized the Conference in his address to the 1981 FAO Conference when he stated:

“The FAO Conference is, and always has been, the most momentous occasion where ministers of agriculture of member nations and experts in various fields gather to take stock of the previous two years and in the light of experience gained, lay down policies and programmes for the coming two years. It is indeed an occasion to pool our experiences and benefit from the interaction and exchange of ideas between all of us”.¹

CONFERENCES OF OTHER AGENCIES

The FAO Conference was similar to the World Health Assembly which was the supreme decision-making body of the WHO, meeting every year. Its main function was to determine the policies of WHO. The World Health Assembly appointed the Director-General, approved the proposed programme budget and considered reports of the Executive Board which was WHO's equivalent of the FAO Council.

1. M.F. Janjua, [Statement] in *Verbatim Records of Plenary Meetings of the FAO Conference, Twenty-First Session, Rome, 7-26 November, 1981* (Rome, 1982), p. 96.

The FAO Conference was also similar to the UNESCO General Conference which met every two years. The General Conference determined the policies and main lines of work of UNESCO. It approved its programmes and budget, elected the members of its Executive Board and appointed, every four years, the Director-General.

The ILO was unique among the UN agencies because of its tripartite structure. At the annual International Labour Conference each member state was represented by two government delegates, an employer delegate, and a worker delegate. Employer and worker delegates expressed themselves and voted according to instructions received from their organizations.

The ILO differed from FAO and other specialized agencies in another respect besides its tripartite Constitution.¹ The International Labour Conference established and adopted international labour standards in the form of International Labour Conventions and Recommendations. Member states were required to submit Conventions to their national legislatures to consider for ratification. After ratifying a Convention, a member state must arrange its laws and practice to conform to the Convention and report periodically to the ILO on how the Convention was being applied. These reports were examined by an independent Committee of Experts which reported to the International Labour Conference. By the end of 1985, it had adopted 161 Conventions.

The International Labour Conference also acted as a forum where social and labour questions were discussed, as did the FAO Conference for agriculture. The ILO adopted the budget of the Organization and elected ILO's governing body,

1. Williams, *The Specialized Agencies and the United Nations*, p. 35.

the Executive Council. Like the FAO Conference, the Executive Council took decisions on ILO's policy and elected its Director-General. As did the FAO Council for FAO's Conference, it prepared the programme and budget which was adopted by the ILO Conference. It met three times a year. The Executive Council comprised 28 government members, 14 employer members, and 14 worker members.¹ Ten of the government seats were permanently held by the leading industrial states. The remaining 18 were elected at the Conference every three years. Thus the ILO governance differed somewhat from that of FAO, WHO, and UNESCO, the other main agencies.

THE COUNCIL, ITS COMMITTEES AND OTHER STATUTORY BODIES OF FAO

The Council was the second-level of the FAO governing body, which met between sessions of the Conference and acted on its behalf as an executive organ responsible for monitoring the world food and agriculture situation and recommending action. The number of representatives was increased over the years, stabilizing at 49 states in 1977. Members were elected for three year terms on a staggered basis by the Conference. Although the rank of main delegates was usually senior and often came from the capitals of governments, most delegations were comprised primarily of officials from their Permanent Representations to FAO in Rome. While they had knowledge of the work of FAO, these officials were far removed from the real problems in their respective countries. This was

1. <http://www.ilo.org/public/english/depts/fact.htm>

the case with other agencies also. Governments who were not members could attend as observers who could make interventions but could not vote.

The Council served as the governing body between Conference sessions and held at least one longer session for a week or 10 days each year in addition to meeting a few days before and after the Conference. The Council was a smaller group, which could go into greater detail in the technical administrative issues, regarding FAO, than the Conference. Decisions made by the Council were never reversed by the Conference.

The Council made fundamentally the same contributions as the Conference. On this intergovernmental forum, governments which might not have diplomatic or good relations met to propose, discuss and formulate solutions to both national and international problems ranging from animal and plant diseases to trade and nutrition. Both developed and developing countries benefited by inconspicuous and often intangible results. Neither could most of these contributions be accomplished by bilateral diplomacy. Would the Ethiopian and Sudanese governments send representatives if this international meeting were organized by Great Britain or the United States? It would probably depend on the state of relations or whether an actual emergency existed as during the drought in 1984-85. During periods of famine, humanitarian needs and responses often surmounted hostilities.

As the Council acted for the FAO Conference, the main functions of the WHO Executive Board were to give effect to the decisions and policies of the World

Health Assembly, to advise it and generally to facilitate its work.¹ The Executive Board was composed of 34 members technically qualified in health and met twice a year.

UNESCO also had an Executive Board which functioned like the FAO Council and the WHO Executive Board. It prepared the work of the General Conference and ensured that its decisions were carried out. Its 58 members were elected by the UNESCO General Conference. The Executive Board met twice a year.

The Committees

Most of the FAO Council's substantive and detailed work was carried out by the eight committees of the Council and its subsidiary bodies. The Programme and Finance Committees were established in 1958 to examine the Programme of Work and Budget in detail. In 1977, these committees were enlarged to consist of ten members in addition to their Chairmen. These people now represented governments, while before 1977 they were serving in their personal capacities. The Committee on Constitutional and Legal Matters was comprised of not more than seven members.

The remaining committees have been open to all member states since 1971. The civil servants who attend these meetings should be adequately briefed or have technical or economic expertise or both as most technical issues should be finalized here in these Committees. Most of the meetings of the Committee on Agriculture have been attended by delegations comprised primarily of Permanent

1. <http://www.who.int/governance/en/>

Representatives stationed in Rome. These officials were quite capable of making relevant decisions provided they were objective and adequately briefed, which they usually were not, since poor countries might not even have qualified technical people to comment on issues. The danger of people just making statements that please the FAO Secretariat arose again. Greater benefits might be realised by FAO and governments if delegations included more officials from their capitals who were also closer to the problems and the political process in their respective countries.

All these committees were major intergovernmental fora, which could make the same kind of contributions as the Conference and Council sessions. Many of FAO's policy issues and programmes were decided here for implementation by the Secretariat and member states. These fora not only resulted in an exchange of ideas between officials of countries, which sometimes did not have diplomatic relations but helped to finalise actually cooperative agreements such as those discussed in the section on FAO's role with regard to trade and the code on pesticides. All these meetings provided states with an opportunity to promote their economic, political and development interests. Most governments did not make adequate use of this opportunity.

The Committee on Commodity Problems was established by the FAO Conference in 1949 as a compromise solution after the International Commodity Clearing House was rejected. It reviewed all international aspects of agricultural commodity problems and provided the FAO Council with advice on policy issues relating to agricultural trade.

As discussed in the chapter on fisheries, the Committee on Fisheries acted as the only global, coordinating body on fisheries for both national and international institutions, that reviewed policies and sought solutions in an endeavour to advise FAO.

The Committees on Forestry and Agriculture were established in 1971 to function in this broad policy manner for those areas. The Committee on Agriculture dealt with all aspects of agriculture from planning, nutrition to rural development and all areas of agricultural science and technology.

The Committee on Food Aid Policies and Programmes reported to the FAO Council on the activities of the World Food Programme. This was a joint committee of FAO and the UN, with half of its members elected by the FAO Council and half by the Economic and Social Council of the UN (ECOSOC).

The Committee on World Food Security was established in 1975 to keep the supply of basic cereals under continuous review to assure an adequate minimum global supply. In the early 1970s, at the time of the drought, grain production fell drastically while imports increased, especially by the USSR. As a result, surpluses disappeared, cereal prices tripled and poor countries such as Bangladesh were priced out of the market. The Committee helped to successfully avert any recurrence of such developments and particularly advocated the need to build national stocks.

COMMISSIONS AND OTHER STATUTORY BODIES

FAO had numerous Commissions and several other committees established by the Conference and Council to advise on the formulation and implementation of policy and to coordinate action in various subject areas. Many of them were regional commissions open primarily to member states from their regions. Several of the regional fisheries commissions have had regional programmes linked to them, involving the entire range of activities in the fisheries sector from assessment to exploitation and conservation.

Such regional commissions existed for animal health, desert locust, plant protection, land and water use in the Near East, agricultural statistics, forestry, agricultural planning in the Near East among others. A few commissions such as the one on fertilizer and the Codex Alimentarius Commission were global. These Commissions were useful and effective fora for discussing problems, developing programmes and exchanging technical information and experiences. They were effective instruments for promoting technical cooperation among developing countries within regions. The effectiveness of these commissions depended very much on the interest governments took in them and the level and quality of their participation.¹ These civil servants should already have technical expertise. FAO had deliberately held meetings for groups of experts in combination with meetings of commissions to ensure more participants were technical people. Some poor countries might not even have had appropriate people to send to technical meetings.

1. *Report of the Seventeenth FAO Regional Conference for Asia and the Pacific, Islamabad, 24 April – 3 May 1984, APRC/84/REP* (Rome, 1985), p. 22.

The real impact of these meetings could not be traced and results were often anecdotal as with other meetings. It was, therefore, necessary to cite such an example. In 1983, Canada claimed to have planned its entire fertilizer production and marketing on the basis of documents prepared for the 1983 meeting of the Commission on Fertilizers, which it did not attend. This case indicated that developed countries can benefit from FAO meetings, especially with regard to information that involves trade and developing countries.

REGIONAL CONFERENCES

FAO Regional Conferences have usually been held the year before the biannual FAO Conference since 1949 within FAO geographic regions other than North America and Oceania. The latter participated in the Regional Conference for Asia and the Pacific. They were organized by the Regional Representatives of FAO who head its Regional Offices in Asia and the Pacific, Africa, Latin America and Europe. These regional sessions were held primarily to provide the Director-General with an account of the current issues viewed important by the regional governments with regard to food and agriculture so that they can be incorporated in the Programme of Work and Budget for the next FAO Conference. Regional meetings could, however, serve an even more important purpose in view of the political conflicts and tensions within the various regions. Mahbub Ul Haq commented on the perpetual state of tension that existed between many developing countries and their neighbours. He described the state of relations between the four countries of the Asian subcontinent as a case in point –

India, Pakistan, Bangladesh and Sri Lanka. They were all trying to alleviate the abysmal poverty within their countries and could learn from each other's development experiences and engage in trade to their mutual advantage. There was room for a great deal of international cooperation here in view of the common interests. He continued:

‘Sadly, the truth is otherwise. There is little trade or travel among these countries. Their economic managers meet only in forums outside the subcontinent, with little attempt at coordination of their separate positions. India's great progress in evolving improved varieties of wheat hardly filters across to Pakistan, which desperately needs such varieties and is searching for them all over the world, nor do the relevant development experiences from Pakistan and other countries successfully defy their national boundaries. The countries of the subcontinent spend as much as \$5 billion a year on “defence”, directed often against their own people or against each other. Between these countries, there is mutual suspicion and a bitter harvest of three major wars in the last three decades. This is not a very promising political climate for economic cooperation. No wonder that, despite their enormous size, these countries speak in international forums with a weak and divided voice.

The case of the Indian subcontinent may be extreme but it is not atypical. East Africa, the Middle East and Latin America offer their own examples, illustrating similar political problems, though in varying degrees’.¹

If the political environment in the regions was such, intergovernmental and expert groups meetings became more important, not only for exchange of experience and information but also for other diplomacy. The interaction of ministers and other senior government officials with common interests could result in improved diplomatic relations between their countries. The importance of both the rank and quality of representation was once again emphasized. As Robert Jordan stated, contacts made among participants from inside and outside

1. Mahbub Ul Haq, ‘Beyond the Slogan of South-South Cooperation’; *World Development*, Vol. 8, No. 10, October 1980, p. 746.

government in the process of conference diplomacy have definite long-term effects that were difficult to measure.¹

The conferences were, however, held to guide FAO in developing its work for the Region and delegates should know about the work of FAO in its field and regular programmes. A case in point was the Fourteenth FAO Regional Conference for Latin America, held in Lima, Peru in 1976. The Delegations had only limited knowledge of FAO programmes and made almost no contribution to the thinking regarding how the Organization's work should evolve in the Region but concentrated mainly on the issue of whether the Regional Office should be moved out of Santiago. Some of the countries of the Region chose to concentrate on trade matters and on regional integration and solidarity. In spite of the high degree of technical expertise in many countries of the Region by that time, most nations chose not to delve into substantive technical problems of food production, conservation, distribution and utilisation. The United States commented on the continuing trend toward politicisation at this Regional Conference.² The developing nations inevitably saw trade as the key to developing not only their agriculture but other aspects of their nations. Apart from the United States, other developed countries regarded this as a form of politicization as trade should be discussed on such fora as UNCTAD and GATT.

Not all countries that participate in the FAO Regional Conferences for Asia and the Pacific (formerly called the Far East) had such similar ecologies, cultures,

1. Thomas G. Weiss and Robert S. Jordan, *World Food Conference and Global Problem Solving* (New York, Praeger, 1976) p. 76.

2. *Official Report of the United States Delegation to the Fourteenth FAO Regional Conference for Latin America and the FAO/ECLA Food Conference for Latin America, Lima, Peru, April 21-29, 1976*, p.19.

levels of development and common problems as those of the Indian subcontinent. Australia, New Zealand, India and China all sent delegates to this Conference. Most of the developing countries within this region did, however, have similar problems.

The Asian and Pacific Region contained more than half of the world's population and more than two-thirds of the population of the developing world. With the exception of a few less developed countries such as Nepal, Somoa and Bhutan, the entire region could be considered a success story with regard to food production. Yet most of the world's hungry people continued to live in Asia. Bhutan was traditionally self-sufficient in food but has had a food deficit since the 1980s. Some countries such as India, Pakistan and Indonesia have made great strides in the decade 1975-1985, due in part to earlier research with regard to high-yielding varieties and irrigation developments. Indonesia was self-sufficient in rice in 1985 for the first time in spite of the growth in demand as rice consumption became a status symbol.¹ Bangladesh has made great strides toward increased food production by its successful introduction of wheat. But all this progress has been offset by population growth. FAO has played its role in all the achievements of this Region, along with other development institutions by providing training, information, policy advice, technical assistance as well as encouraging investment. Examples include its assistance to Pakistan in introducing wheat and its assistance to Indonesia in a number of investment projects.

1. Selo Soemardjan, 'Influence of Culture on Food and Nutrition: the Indonesian Case', in Margaret Biswas and Per Pinstrup-Andersen, eds., *Nutrition and Development* (Oxford, Oxford University Press, 1985), p. 180.

The increase in food production, however, barely kept pace with population growth in most of the poor nations in the region during the 1970s. The man/land ratio has been decreasing and seven countries in the Region will be unable to feed their rising populations in coming decades without a major improvement in their level of agricultural technology. Many countries of the Region were also prone to drought, tropical cyclones and floods. On the other hand, most countries in the Region have built up their reservoir of national expertise to the point where the need for traditional technical assistance projects has been greatly reduced. Over many years, FAO has been involved with other agencies in the training and national institution building that has enabled these nations to develop their own expertise. Each region did have similarities in both problems and solutions.

Africa had 'African problems' with regard to development. Even if it had similar problems such as scarce land resources in the Sahel, the solutions were different. African countries also had different problems from Asian nations such as lack of expertise and different levels of education. Moreover, African countries suffered from a lack of effectively functioning political institutions. Hence, Asian technology could not be readily transferred to Africa as many people had hoped.

The Regional Conferences had fundamentally the same weaknesses and strengths as the main FAO Conference. The lengthy country statements delivered to the plenary do, however, become more relevant as the regions have common problems and potentials. There were also not too many to listen to.

As at the main FAO Conference, representatives of individual countries said one thing and often returned home to do something else or nothing. One of the

best examples was the opening statement by President Marcos of the Thirteenth FAO Regional Conference for Asia and the Far East held in Manila in 1976.¹ Marcos stated that the power to turn around the food crisis did not lie in the intervention of other nations or on imports but rather it rested squarely on the Asian people and their respective governments. Behind every statistic on Asia's hungry millions was an indictment of the inability of Asian governments and societies to be fully self-reliant, he said. Considering its wealth and progress in agricultural development, the main reason for the serious malnutrition in the Philippines has been the failure to redistribute wealth. The American-initiated land reform programme failed because of the lack of government support. Large plantations that produced export crops such as sugar and coconut were exempt from reform, while lands that produced rice and maize were reformed. This reflected the government's bias toward landlords and private industry. When Marcos declared martial law in 1971, he was less dependent on political parties and landlords but he failed to implement reform on large plantations.

As discussed earlier, the Minister and civil servants might not be able to implement what they wished to do. The same applied to the recommendations for action adopted by the meeting, most of which were addressed to governments and were not binding. The FAO Secretariat invariably tried to take some action with regard to those addressed to it, hence the broad scope of its activities.

The conflicts between developed and developing countries were less apparent on these fora. The United States often participated in regional conferences either

1. *Official Report of the United States Delegation of the Thirteenth FAO Regional Conference for Asia and the Far East, Manila, Philippines, August 5-13, 1976.*

as a delegate or as an observer. Great Britain and France usually attended as observers, while other developed countries have also occasionally attended them. The United States participated in these regional conferences because it had an interest in what FAO and observers from various development funds were doing in the Region with regard to agricultural development and investment. They also provided the United States with opportunities for consultation with representatives of countries from the region on current production and trade in agricultural products. The United States obtained not only useful information on agriculture and trade in the region but also opportunities to explore further market development in the region for its own agricultural exports.¹

As discussed earlier, though the United States attended these meetings primarily to obtain information regarding trade, it objected to developing countries discussing trade on these fora.²

Although the different interests of poor and industrialized nations were less obvious here, there has been politicization on these fora. African Regional Conferences have been highly political but have become more business-like over the years. The 1962 African Regional Conference in Tunis, for example, was adjourned by the Director-General when the African delegations refused to participate in a conference at which a delegation from South Africa was present. This carried over into the highly political debate at the 1963 FAO Conference regarding South Africa's participation in the Regional activities, resulting in its

1. *Official Report of the United States Observer Delegation to the Thirteenth FAO Regional Conference for the Near East, Tunis, Tunisia, October 4-12 1976, p.1.*

2. *Official Report of the United States Delegation to the Fourteenth FAO Regional Conference for Latin America and the FAO/ECLA Food Conference for Latin America, Lima, Peru, April 21-29, 1976, p.19.*

withdrawal from FAO.¹ By the Ninth Session in 1976, they had begun to concentrate on more substantive issues² such as trading among themselves as one way of improving their conditions. The governments of the African Region had also begun to realise that aid could only be a supplement for national actions undertaken by the countries themselves.

TECHNICAL MEETINGS

The FAO Secretariat held numerous ad hoc technical meetings over the years on a great variety of problems and issues in agriculture, fisheries and forestry, common to many nations. These meetings were held on both economic and technical aspects of such subjects as food losses, genetic plant and animal resources, epizootic animal diseases, nutrition, agricultural inputs etc. While these experts were theoretically invited in their individual capacity, geographical distribution was invariably followed. This could serve a useful purpose for exchange of ideas and information from different regions but it usually did not result in the best people being invited. The most eminent technicians were often too busy to attend, even when invited, especially when given short notice of the meetings as they sometimes were.

The professionals invited to FAO meetings often included civil servants who could not deviate from official national policies. The best they could do was maintain a silence if they did not agree. While most university professors from

1. *Official Report of the United States Delegation to the Twelfth FAO Session of the FAO Conference, Rome, Italy, October 31 – December 5, 1963, pp. 67-68.*

2. *Official Report of the United States Delegation to the Ninth FAO Regional Conference for Africa Freetown, Sierra Leone, November 2-12, 1976.*

Western countries were independent, those from the Third World and Eastern Europe generally were not, with the exception of some countries such as Egypt and India, which often were. While the best experts from the West were easily identified because they contributed to international journals, most developing country technical experts were not so easy to identify. They might be knowledgeable but may have written very little, if anything at all. There was no incentive for them to write either in terms of salary or promotion in most developing countries. It was usually difficult for East European experts who were invited to international meetings to obtain the necessary authorization. Political changes in Eastern Europe have brought about changes for scholars. Even though the USSR was not a member of FAO, its technicians were sometimes invited to meetings.

It was necessary to analyze a meeting in an area of knowledge where one was in a position to actually judge the subject matter. (The author has worked in the area of renewable energy resources). The meeting which is analysed is the Expert Consultation on Energy Cropping Versus Food Production held in Rome 2-6 June 1980 and organized by the Agricultural Services Division.

The participants are described in the introduction to the proceedings of the meeting.

‘It was attended by 15 experts who were invited in their personal capacity. Of this group, 9 came from developing countries. Of them, two were from countries with ongoing alcohol programmes, three came from countries with well advanced plans to enter this field and the remaining four came from countries that are major food importers and thus represented the consumer interest. Among the 5 experts from developed countries, one was from Eastern Europe, three from Europe and two from major grain exporters.

In addition, 24 observers participated, with a predominance of international technical organizations or national technical assistance groups. The secretariat for the consultation was made up by 11 FAO staff members and three consultants. The list of participants and observers is shown in Appendix C'.¹

The country from which one originates was not a credential for a technical meeting. The participants were not the internationally known people in the field. Some might have written a paper or two in that area but most were civil servants who had to comply with the positions of their respective governments. The author knew several of the participants and energy can be described as one of the areas they knew little or nothing about. It was not necessary to invite 15 people to comment on the document when 10 actual experts would have done a better job. The preparation of the basic study for the meeting involved 11 FAO experts and three consultants. Why involve all these people when one eminent specialist could have written the entire document resulting from the meeting including the case studies and discussions in four to six weeks? The case studies were not rigorous analyses of the situation in respective countries but primarily reports on national situations. The document of one specialist could have been sent to a few other experts for comments at a nominal fee. This would have resulted in the saving of tens of thousands of dollars for a better product. The travel expenses of the invited experts probably cost FAO about \$45,000 (1980 exchange rate). In addition, the fees of the three consultants had to be paid as well as the salaries of FAO staff. Ten thousand dollars could do a lot for a poor man whose average income can be as little as a few hundred dollars a year. Holding numerous expert group meetings

1. FAO, *Energy Cropping Versus Food Production: FAO Expert Consultation, Rome 2-6 June 1980*, FAO Agricultural Services Bulletin 46 (Rome, 1981), p. i.

like this was not a cost-effective way of disseminating ideas. The presence of 15 so-called 'experts', however, put the seal of approval on FAO documents and helped to appease governments.

Given the calibre of the people present, it was not surprising that the realistic alternative, that which actually happened, was not even raised during the discussions. The whole theme of the meeting was that 'the world is just on the threshold of making large-scale use of its agricultural production capacity to make liquid fuel'. This would result in higher food prices and increased hardship for the poor. The reality was that oil prices dropped drastically during the 1980s and therefore energy cropping became prohibitively expensive compared to all other forms of energy. Commercial large-scale energy cropping was, therefore, discontinued. Even Brazil, which had a large gasohol (alcohol from gas) production programme, decided to stop the payment of subsidies for gasohol production since it was no longer economically viable.

This expert group meeting cannot be dismissed as a unique meeting but rather described as an average United Nations meeting. The United Nations tends to hold too many meetings, inviting too many people with too little follow-up. The proceedings of the Expert Consultation on Energy Cropping versus Food Production was, however, a fundamentally sound document in other respects and could have proven useful if read by decision-makers and scholars. Most of these people were totally unaware of its existence, as was the author, until she undertook this study and found it by accident.

The quality of the UN meetings varied considerably. To be fair to the Agricultural Services Division, another expert group meeting was examined, which they held at about the same point in time. The FAO/UNEP Expert Consultation on the Reduction of Food Losses in Perishables of Plant Origin held at FAO headquarters from 6-9 May, 1980 appeared to have been better organized.¹ While the author could not judge the quality of the experts as she knew less about this area, at least they worked at the relevant technical research institutions.

We were told more than 30 specialists were involved in the study at one stage or another. Three consultants were once again hired and 15 experts attended the expert consultation to comment on the document in addition to FAO staff involved. As argued before, this was too many people.

The report of the meeting was primarily intended for ‘policy-makers, planners, development corporations and potential investors, although it could conveniently be used as background material for training courses in post-harvest technology’. By what mechanism was it to reach these people? Even if they did receive it, most policy-makers were too busy to read a 70 page document. They might read the 7 pages comprising Part I, the summary, recommendations and conclusions. Most documents meant for policy-makers ended up only in the hands of scholars whose advice was only rarely taken by policy-makers. Some FAO staff members in various divisions had lists of people or institutions to which they sent documents but, by necessity, these lists were very selective.

1. FAO/UNEP, *Food Loss Prevention in Perishable Crop, based on an Expert Consultation jointly organized by FAO and UNEP (Rome, 1981)*, xix, 72 pp.

The above discussion comprised the negative side of the argument. On the other hand, if one decision was implemented in one country in due course because of an FAO meeting, the entire process could be considered to have been more than worth it. It was difficult to judge the impact of meetings. The technical meetings could also have an impact on FAO and its staff: the discussions could influence FAO's future programmes of work and budget and similarly influence countries not only by the production of a document, which may not be read by many people after the expert meeting. Many FAO staff members may attend expert group meetings as observers. The same document could be produced in a less expensive process and more effort and money could be put into effective distribution of the document. Dr Saouma, the Director-General of FAO, himself pointed out that much of FAO's meetings and travel expenses have been criticised as being unnecessary.¹ He reduced the number of meetings soon after assuming office.

CONCLUSION

Out of all the functions of FAO, the developed countries claimed they benefited most from FAO fora. The developing countries also benefited a great deal as they were poor agricultural economies. The global, public fora could not be replaced by bilateral diplomacy. They provided countries that do not have diplomatic relations or good relations, with a chance to interact. This was particularly important in regional meetings, which could result in regional projects.

1. E. Saouma [Statement] in *The New York Times*, April 25, 1976, cited in U.S. Select Committee on Nutrition and Human Needs, *The United States, FAO and World Food Politics*, p. 27.

Regional conferences were held primarily to provide the Director-General with an account of the current issues viewed as important by the regional governments with regard to food and agriculture so they could be incorporated in the Programme of Work and Budget for the next FAO Conference.

Although the United States has attended regional conferences to obtain information regarding trade, among other information, it has objected to developing countries discussing trade on these fora, stating these discussions belong at UNCTAD and GATT.

By 1969 a trend had developed within governing bodies that polarized sentiments, positions and votes on the basis of a division between developed and developing countries. The developing countries mainly exerted pressure for increased funding, while the developed countries, which pay most of the budget, tended to restrain its growth.

There have also been differences between the two groups on subjects such as trade; FAO's relationship to UNDP, including the relationships with country representatives; the TCP; and programme evaluation.

While the main governing bodies were the Conference and the Council, decisions were also made by the eight committees of the Council and its subsidiary bodies. Most of the Council's substantive work was carried out by them. All these committees were major intergovernmental fora, which could make the same kind of contributions as the Conference and Council sessions. Many of FAO's policy issues and programmes were decided here for implementation by the Secretariat and member states. Furthermore, FAO had numerous commissions

and several other committees established by the Conference and the Council to advise on the formulation and implementation of policy and to coordinate action in various subject areas. Many of the Commissions were regional, open primarily to member states in the region, as in the case of coastal fisheries. In addition, FAO has held hundreds of technical meetings over the years. The calibre of delegates to all meetings was important because, though the impact was usually not immediately evident; decisions have been made because of what transpired at these meetings, both at FAO and in member states.

CHAPTER 5

TECHNICAL ASSISTANCE DELIVERED BY FAO

The principal primary sources relied on in the following pages were:

1. FAO, *FAO in the Field*, Rome, 1965
2. FAO, *Review of Field Programmes 1986-87*, Rome, 1987.
3. FAO, *Review of Field Programmes 1984-85*, Rome, 1985.
4. FAO, *Cooperation Through Trust: FAO Trust Fund in Action*, Rome, 1983.
5. *Review of Certain Aspects of FAO's Goals and Operations: Appendices to the Report of the Programme and Finance Committees*, FAO, Rome, 1989.
6. FAO, *Review of Field Programmes 1982-83*, Rome, 1983.
7. FAO, *Review of Field Programmes 1974-75*, Rome, 1975.
8. *FAO: The First Forty Years, 1945-85*, Rome, 1985.
9. Ergas, Henry, *An Evaluation of FAO's Technical Assistance in Planning*, FAO, Rome, 1985.
10. FAO, *Review of Field Programmes 1976-77*, Rome, 1977.
11. FAO, *Review of Field Programmes 1980-81*, Rome, 1981.
12. Swaminathan, M.S., 'Statement by the Independent Chairman of the Council', in *Verbatim Plenary Records of the FAO Conference, Twenty-Second Session, Rome, 5-23 November 1983*, FAO, Rome [1984].
13. Jumas, S. [Statement] in *Verbatim Records of Meetings of Commission II of the FAO Conference, Nineteenth Session, Rome, 12 November – 1 December 1977*, FAO, Rome [1978].
14. FAO/UNDP, *Agricultural Training: Report of an Evaluation Study*, Rome, 1980.
15. FAO, *Review of Field Programmes 1980-81*, Rome, 1981.
16. Brammer, Herbert [Statement] in *Verbatim Records of Plenary Meetings of the FAO Conference, Twenty-First Session, Rome, 7-26 November 1981*, FAO, Rome, 1982.
17. Linner, S., W.M. Johnson, and T.E.C. Palmer, *Report of the Evaluation of the FAO Technical Cooperation Programme, Council of FAO, Eighty-Eighth Session, Rome, 4-7 November 1985*, FAO, Rome, 1985.

INTRODUCTION

FAO has been extending technical assistance to member countries since 1947. Both recipients and FAO concurred that field projects were the agency's most important function. In all the specialized agencies, standard setting and channelling technical assistance have been of greater importance than information exchange. Except in the ILO, providing technical assistance to developing countries had become the most important function of the agencies. In ILO setting international standards for the improvement of labour and working conditions was of paramount importance.¹ In FAO and in other agencies, data were accumulated on a vast scale but not always properly analyzed nor was the world's attention drawn to their policy implications. For example, although the data about the deterioration of the food situation in Africa in the early 1970s and the early 1980s were being accumulated by FAO, it was the World Bank which actually analyzed what the world and African governments should do to help. The two World Bank reports *Accelerated Development in Sub-Saharan Africa (The Berg Report)*, 1983 and *Towards Sustained Development in Sub-Saharan Africa*, 1984, stimulated action on a large scale by multilateral and bilateral agencies.

Field projects were the prime image makers of FAO, providing much needed technical assistance, which for some countries in the early years had to be very basic, such as resource surveys.

Those field projects financed by extra-budgetary funds were designated as the Field Programme, which with the TCP provides documentation and experience

1 . Douglas Williams, *The Specialized Agencies and the United Nations: the System in Crisis*, (New York, St. Martin's Press, 1987), p.198.

for Regular Programme activities. The ultimate aim of technical assistance has been to enhance the capacities of recipient countries to themselves carry out programmes of rural and agricultural development. While most technical assistance has been extended to developing countries, FAO assistance was extended to countries in Europe immediately after World War II and has continued in some of its lower-income countries such as Bulgaria, Poland, Hungary and Portugal.

Since there were uncertainties in the precise measurement of the impact of projects, discussion has involved their numbers, experts, training and the way technical assistance has changed both in nature and funding. Technical assistance was primarily for the benefit of developing countries, though developed countries gained through employment and sale of equipment.

FAO's provision of technical assistance in countries began in 1947, when the United Nations Relief and Rehabilitation Agency (UNRRA) turned over its outstanding rehabilitation programmes in agriculture to FAO; they were located in a number of European countries as well as in China, the Philippines and Ethiopia.

The ETAP began in 1950, and from then to 1964, FAO was responsible for approximately \$113 million of this Programme; by 1965, it had almost 500 experts working in this field programme.¹

The Special Fund created in 1958 provided not only experts and fellowships but also larger amounts of equipment for larger projects carried out over longer periods of time. By mid-1965, FAO had been assigned 210 Special Fund projects with a total Fund contribution of \$180 million and matching contributions of \$221

1. FAO, *FAO in the Field* (Rome, 1965), p.16.

million from governments.¹ Between 1950 and 1986, approximately 15,000 field projects had been completed,² and there were 2506 projects ongoing. Table 2 points to the steady growth in the number of projects in FAO field programmes since 1950.

Table 2

Evolution of FAO field programmes 1950-1986

Year	Number of Projects	Annual Expenditure \$ million
1950	22	0.1
1960	170	8.4
1970	1262	79.9
1980	2213	279.8
1986	2506	315.1

THE UNITED NATIONS DEVELOPMENT PROGRAMME

The Special Fund and ETAP were consolidated to form UNDP in 1965. The distinction between large and small projects continued and the contributions remained voluntary, growing steadily until its first financial crisis in the mid-1970s. For almost the entire two decades after it was founded, UNDP provided most financial resources for FAO technical assistance within countries and remained the largest single source of its fund for technical assistance. In 1970, UNDP provided the support for 90 percent of FAO's Field Programme, but this share had dropped to about 70 percent by 1974, 50 percent by 1982 and to just

1. FAO, *FAO in the Field*, p.22.

2. FAO, *Review of Field Programmes 1986-87* (Rome, 1987), p.109.

around 40 percent in 1984.¹ There was also a drop in UNDP funding of UNESCO, ILO and other agencies it funds.

TRUST FUNDS

As with WHO, ILO and UNESCO, the other major source of FAO funding of its field activities came from trust funds, which in 1983 became the prime source of funds for the Field Programme: they comprised multilateral assistance, unilateral trust funds and associate expert schemes. With multilateral assistance, a donor agreed to provide finances to a country or countries while FAO used its technical expertise to execute the project. With unilateral trust funds, a developing country had the finance but wanted FAO to implement the project because it did not have the expertise. The Associate Expert Scheme existed to mobilize young professionals in field projects where they obtained development experience. The donor country provided the personnel, their salaries and travel expenses. The donors benefited by having their professionals trained, while FAO organized the cooperation.

Trust funds enabled the use of FAO's technical expertise for the project and technical backstopping. Technical backstopping meant checking projects for technical accuracy at FAO Headquarters. The funds also made available some of FAO's special knowledge in certain areas such as prevention of post-harvest losses, community forestry and in food security. Traditional donors of trust funds have been the Nordic countries and the Netherlands but almost all industrialized

1. FAO, *Review of Field Programmes 1984-1985* (Rome, 1985), p.5.

countries have participated to a small extent in the 1980s. The trust funds in fisheries are discussed in Chapter 8 on FAO and Fisheries.

Trust funds increased as developing countries realized the advantages of having FAO participate in a project even if they had sufficient finance. When countries were short on money or ideas for a project, FAO not only prepared the trust fund project for the recipients, it also helped to recruit donors and administer the project. Trust funds have been established for nearly all aspects of agricultures, fisheries and forestry.¹

The fact that so many organizations and countries had FAO execute their projects gave an indication of FAO's capabilities and how much respect these countries had for the sound, though not perfect, work of the agency. Projects are comprised of experts, equipment and training, all of which are discussed below in this chapter. Furthermore, FAO must undertake projects which bilateral aid considers too much of a risk, if asked to do so by a member government. Also, projects that are considered to be tainted by imperialism if undertaken by a bilateral donor could be undertaken by FAO without doubts about the motive. Countries denied aid for ideological or political priority reasons by national donors, often found their requests granted by FAO.² Furthermore, bilateral donors tended to give aid for political reasons. The U.S. donates aid mostly to a limited number of countries who were its allies, while Britain, France and Belgium gave aid mainly to their former colonies and countries with whom they wanted political alliances.

1. FAO, *Cooperation through Trust: FAO Trust Fund in Action* (Rome, 1983), pp.10-11

2. Raymond F. Hopkins and Donald J. Puchala, *Global Food Interdependence; Challenge to American Foreign Policy* (New York, Colombia University Press, 1980), p.139.

One matter of concern was that, even with the number of field projects continually increasing, FAO reduced its Regular Programme staff during the 1980s, resulting in inadequate technical support. The FAO report of the Group of Experts recommended increases in staff in a variety of Regular Programme areas.¹ Only in publishing did it recommend staff reduction and resort to more commercial publishing.²

The external financing of the field projects meant that the donors might have considerable say in their implementation. Nevertheless, the role of FAO remained to make available to member states its worldwide experience in agriculture. It was the most important segment of the economies of most member nations with the exception of some industrialized countries and the oil producing nations. Member states received jobs and consultancies related to their financial contributions to FAO's budget. France and the United Kingdom have had a high proportion of experts in tropical agriculture due to their colonial past, both on regular staff and as consultants.

TECHNICAL COOPERATION PROGRAMME (TCP)

The other field activities, which were a part of the Regular Programme budget, were those of the TCP. It consisted of 10 percent of the entire field activities in 1983.³ The TCP was discussed in the history of FAO. TCP projects were small and directed towards quick actions to meet urgent and unprogrammed

1. *Review of Certain Aspects of FAO's Goals and Operations* (Rome, FAO, 1989), p.123.

2. 'FAO Management Review' in *Review of Certain Aspects of FAO's Goals and Operations*, p. 22.

3. FAO, *Review of Field Programmes 1984-1985*, p. 5.

needs for technical and, in some cases, emergency assistance. Requests for TCP projects increased from about 280 projects in 1980 to almost 600 in 1984.¹ About 800 projects were implemented in 1986 in comparison with 640 in 1985,² indicating the popularity of such projects with recipients. In the early 1980s, project delivery under the TCP rose to more than \$20 million annually with the average project size around \$70,000. The share of the TCP that went to Africa has remained at about 40 percent.³ This included most of the least developed countries and low-income food deficit countries. The TCP channelled assistance to increase food production and raised the nutritional levels of the rural poor and small farmers. The appraisal process of TCP projects was swift: an average of only two-and-a-half months elapsed between project request and approval, mainly due to the TCP's unprogrammed nature. Another reason for the TCP's popularity might have been that it was often half comprised of equipment that remained with the project recipients after the project period (reduced to 35 percent for vehicles, although vehicles were not to be the project's main objective).

FUNDING OF FIELD ACTIVITIES

FAO field operations were financed mainly from UNDP and trust funds and, in a minor way, from the TCP of the FAO Regular Programme – see Table 3. The total field expenditure per annum increased from \$80 million in 1970 to approximately \$300 million in 1985-87.⁴

1. FAO, *Review of Field Programmes 1984-1985*, p. 9.

2. FAO, *Review of Field Programmes 1986-1987* (Rome, 1987), p.10.

3. FAO, *Review of the Regular Programme 1986-1987*, p. 89.

4. FAO, *Review of Certain Aspects of FAO's Goals and Operations*, p. 89.

In real terms, as measured in constant 1975 prices, the 1987 annual expenditure remained below the 1975 level. The total number of projects increased from 1300 in 1970 to about 2600 in 1987. The number of experts and consultants working on FAO projects decreased from around 2,100 in 1970 to about 1,900 by 1988.

Yearly Expenditures on FAO field Programmes
(U.S. \$ million, by programme and programme category)

FIELD PROGRAMMES	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
1. FAO/UNDP Programme	69.9	85.8	85.1	78.8	78.4	119.7	115.2	88.4	111.2	131.5	167.1	182.5	141.1	116.5	109.2	115.9	128.8
2. Trust Fund Technical Assistance																	
FAO/Government Programme	1.5	2.7	3.3	5.2	6.3	11.2	17.9	18.9	20.8	24.0	32.6	38.9	44.4	43.8	56.8	65.4	73.0
Assoc. Prof. Off. Programme	3.3	3.6	4.8	5.9	7.4	9.7	9.4	9.4	10.2	12.2	14.5	14.6	13.0	12.6	13.7	13.2	12.9
Near East Cooperative Programme	-	-	-	-	-	-	0.3	0.5	2.9	4.4	4.8	3.3	3.0	1.3	0.7	0.9	0.8
Unilateral Trust Funds	1.0	0.9	0.8	1.1	3.6	3.5	4.6	5.8	7.7	8.9	10.9	13.8	24.5	33.5	38.2	42.1	34.7
PFL Special Account	-	-	-	-	-	-	-	-	0.1	1.2	3.6	4.0	2.7	1.5	0.5	0.6	0.6
Freedom From Hunger Campaign/AD	2.3	2.3	1.8	2.0	2.2	2.7	2.3	2.6	2.0	2.3	1.6	1.7	1.0	1.1	1.0	1.1	0.9
UNFPA	-	0.2	0.5	0.9	1.3	1.9	1.7	2.3	2.3	3.7	3.5	2.3	1.9	0.9	1.7	2.1	1.3
UN Environment Programme	-	-	-	-	0.2	0.6	1.5	2.1	2.1	1.3	1.3	0.8	0.9	1.9	0.8	0.9	0.6
Other UN Organizations	1.5	1.5	0.7	0.3	0.4	0.4	0.5	0.7	0.6	1.5	1.7	2.9	3.1	4.7	10.5	9.4	7.1
Special Relief Operations (OSRO)	-	-	-	3.6	9.6	14.3	6.3	3.7	6.8	2.1	14.7	30.4	15.5	12.2	5.3	4.0	4.1
Int. Fertil. Supply Scheme (IFS)	-	-	-	-	1.3	53.8	31.4	13.5	6.8	9.1	3.3	2.2	3.8	0.1	3.2	1.5	1.6
Emergency Centre Locust Oper. (ECLOP)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.0
Miscellaneous Trust Funds	0.4	0.4	0.5	1.3	1.2	2.1	2.3	2.3	3.5	6.1	6.4	5.2	5.9	6.7	7.2	6.4	6.6
Sub-Total	10.0	11.1	12.4	20.4	33.5	100.2	78.2	61.8	65.8	76.3	98.9	120.1	119.7	120.3	139.6	147.6	151.2
<u>TOTAL EXTRABUDGETARY</u>	<u>79.9</u>	<u>96.9</u>	<u>97.5</u>	<u>99.2</u>	<u>111.9</u>	<u>219.9</u>	<u>193.4</u>	<u>150.2</u>	<u>177.0</u>	<u>207.8</u>	<u>266.0</u>	<u>302.6</u>	<u>260.8</u>	<u>236.8</u>	<u>248.8</u>	<u>263.5</u>	<u>280.0</u>
<u>FIELD PROGRAMMES</u>																	
3 TCP	-	-	-	-	-	-	0.6	6.2	12.7	13.9	13.8	15.4	17.4	22.8	20.5	27.5	35.1
<u>TOTAL FIELD PROGRAMMES</u>	<u>79.9</u>	<u>96.9</u>	<u>97.5</u>	<u>99.2</u>	<u>111.9</u>	<u>219.9</u>	<u>194.0</u>	<u>156.4</u>	<u>189.7</u>	<u>221.7</u>	<u>279.8</u>	<u>318.0</u>	<u>278.2</u>	<u>259.6</u>	<u>269.3</u>	<u>291.0</u>	<u>315.1</u>

In the late 1970s, some major donors began to shift their aid to bilateral, rather than multilateral channels. There had been a reduction in concessional aid to many countries, in particular technical assistance through the UN system. Within multilateral assistance, the amount given on a grant basis had been directed through trust funds and special funds, rather than UNDP. While UNDP resources grew by more than 40 percent in real terms, between 1973 and 1987, there had been a sharp falling off in growth of contributions since 1979. This resulted in a reduction of FAO/UNDP field programmes, which became evident in 1982-83.¹ Project cutbacks resulted in the loss of some experienced experts and a cut in training and institution building.

In the early 1970s, the number of fellowships provided from UNDP funds was about 1,500 for each biennium.² The main host countries had risen from 29 in 1970 to 41 in 1974.

In May 1975, FAO was administering about 254 inter-country projects with aid inputs of \$84.8 million. Sixty-two percent of these inputs were committed by UNDP. FAO was also cooperating with regional, inter-regional and global projects operated by other UN agencies.

There was an estimated 31 percent decline in regional projects such as pest and disease control, watershed and water basin development and fisheries resources assessment and development between 1981 and 1983.³ As of early 1983, FAO had 1,500 field experts in post (excluding short term staff and associate experts) and was

1. FAO, *Review of Field Programmes, 1982-1983* (Rome, 1983), p. 3.

2. FAO, *Review of Field Programmes, 1974-1975* (Rome, 1975) pp. 5-6.

3. FAO, *Review of Field Programmes, 1982-1983*, p. 5.

operating some 2,430 field projects in countries. Small-scale projects of short-term duration particularly under the TCP increased significantly in 1982-83.¹ Total delivery of all field activities in 1984 was \$269 million and was expected to approach \$300 million in 1985.²

Since the late 1970s, FAO projects have been increasingly executed in Africa. During the biennium 1986-87, about 45 percent of the \$2,000 million allocated went to projects in Africa South of the Sahara, followed by 23 percent in Asia and the Pacific.³ Around 50 percent went to the least developed 42 countries, 25 of which are in Africa.

While traditionally the specialized agencies should be the executors of UNDP funds within their expertise, in the 1980s the relationship had been changing as UNDP executed more of its own projects, also employing private consulting firms and, on occasion, bilateral aid agencies. UNDP believed that executing its own projects provided it with useful feedback for funding. In the majority of projects UNDP had been commissioning, it had not found fully satisfactory FAO's quality of work or its speed of procedures.⁴ As developing country governments became more self-reliant, UNDP channelled more funding directly to them for their own technical assistance contracting.

Four conflicting issues in the relationship between UNDP and FAO remained by 1987:

- direct project execution by UNDP Office of Project Execution.

1. FAO, *Review of Field Programmes, 1982-1983*, p. 10.

2. FAO, *Review of Field Programmes, 1984-1985*, p. xi.

3. *Review of Creation Aspects of FAO's Goals and Operations*, p. 89.

4. *Review of Certain Aspects of FAO's Goals and Operations*, p. 55.

- use of non-specialized agencies by UNDP in execution of projects, which fall within FAO's mandate.
- enhancement of UNDP's project preparation facility.
- inadequate reimbursement of support costs to FAO (the actual costs to FAO in support of projects were 21 percent of delivery, while the standard rate of reimbursement was 13 percent by UNDP).

Despite these problems, UNDP remained the largest single source of FAO's extra-budgetary funds and FAO remained the largest agency for UNDP programmes in 1987.

The impact of FAO's technical cooperation activities was greater than that reflected in field project expenditures. Many of its activities funded under the Regular Programme such as seminars, workshops, training programmes and documents contributed ideas to the flow of technical assistance to poor countries.

GOVERNMENT FUNDING

Economic difficulties in developing countries have continued to impede government involvement in field projects.¹ This took the form of lack of counterpart funding for key project items such as equipment, buildings, vehicles, etc; absence or delays in implementation of activities related to project activities such as marketing or input service. It could also result in the absence of counterpart staff or their lack of commitment due to low salaries, the absence of job security or poor career prospects. Inadequate involvement did not mean lack of interest in these circumstances on the part of government.

1. FAO, *Review of Field Programmes 1984-1985*, p. 42.

THE CHANGING NATURE OF FIELD ACTIVITIES

In the 1950s and 1960s, international staff performed duties and undertook responsibilities, which, in the 1970s and 1980s, were mostly taken over by the developing countries themselves.¹ Common functions were basic surveys, and then the collection and analysis of statistics. Line management responsibilities in government ministries, institutes and agencies were common duties under ETAP. Except in Africa, by 1985, very few of these activities remained as technical assistance. Many countries in Africa and elsewhere still required a broad combination of FAO activities at field level, including assistance for training and building national institutions. After the WCARRD Conference in 1979, many of FAO's projects included rural development measures particularly aimed at reaching the poor. In thirty years, some countries had developed their food and agriculture to such a degree that they needed few long-term interventions.

In the early 1970s, projects training the human resources necessary for self-reliance in development were the main goal. In the late 1970s, FAO began to involve government in the daily management and operation of the projects. A limited number of projects were therefore run by national directors and coordinators assisted by international experts and consultants. By 1987, there were 170 national project directors and 160 national project professionals.² In 1975, except in a few countries, projects remained donor-oriented in both multilateral and bilateral aid.³ Projects were either prepared by donors' staff or consultants working on their behalf. This explains the lack of government involvement or the 'target population' in the implementation

1. FAO, *Review of Field Programmes 1986-1987*, p. 112.

2. FAO, *Review of Field Programmes 1986-1987*, p. xvi.

3. FAO, *Review of Field Programmes 1974-75* (Rome, 1975), p. 77.

of projects. 'Target population' referred to small farmers and the poor as project targets. This changed markedly where nationals took over responsibility for projects in the decade up to 1985.

Other shortcomings were repaired, such as delays in delivery including recruitment of experts, placement of fellows and ordering of equipment, but the late recruitment of international experts remained a problem.

As with most other UN agencies, much of FAO's work lent itself to technical cooperation among developing countries (TCDC). This meant increasing use of experts, equipment, consulting firms and research and training institutes from developing countries. One of the most impressive uses of TCDC has been for desert locust control. FAO was concerned with four out of five regions subject to locust invasion and measures were applied from it. The countries contributed a sum for a trust fund for surveys, training and other operational costs with FAO providing staff for regional and overall coordination. This allowed FAO to conduct a regular survey and an early warning system to control locusts before they could inflict widespread damage. FAO has produced daily weather charts of the entire desert locust area. Staff came from the region and FAO ensured that national teams had sufficient insecticides, sprayers, transport, etc. There was no widespread crop damage between 1962 and 1985.

The use of TCDC was described in the chapter on FAO and fisheries. Economic cooperation among developing countries (ECDC) was also widespread. The FAO Technical Consultation on ECDC in Agriculture recommended that the developing countries aim at overall self-sufficiency in food and agriculture. It suggested a

programme of action made up of a wide range of components, including cooperation in the trade and distribution of agricultural inputs in land and water management and control of diseases and pests. Further consultations recommended a series of measures to promote inter-regional trade in agricultural inputs. Studies have been published on the possibilities of expanding trade between developing countries in rice, in fats and oils and in livestock and meat.

The potential for ECDC remained substantial. Between 1970 and 1982, agricultural exports of developing countries to each other grew more than four times faster than their exports to industrialized countries.¹ In 1982, indebtedness and foreign exchange slowed the trade.

FAO PROJECTS

FAO projects were comprised of experts, equipment and training.

Experts

As an intergovernmental organization, FAO was obliged to find for work in recipient nations the best experts available and broadly these experts have proved competent and adaptable and have performed well.² They have contributed not only their technical expertise in all areas but often other equally useful ideas. Many have become career FAO/UNDP experts with a good track record. It did, however, have an advantage over bilateral aid in that it could employ nationals from any of member states, for many developed countries had limited, or no, expertise in certain tropical

1. FAO, *The First 40 Years, 1945-85*, (Rome, 1985), p. 108.

2. Henry Ergas, *An Evaluation of FAO's Technical Assistance in Planning* (Rome, FAO, 1985), p. 20.

areas such as tropical soils, tropical fisheries and tropical plant and animal diseases. This was true for all UN agencies.

Political considerations were, however, not entirely absent. Governments have exercised choice in which experts they accept, often depending on diplomatic relations. Somalia did not accept experts from Kenya or Ethiopia in the 1970s and 1980s and vice versa even if these were the most appropriate personnel to transfer relevant technology in the regional context. Most UN experts in Afghanistan were from Eastern Europe during its socialist regime, but Bangladesh has accepted at least one expert from Pakistan. Governments often requested a shortlist of experts from which to choose, which could lead to delay, but FAO staff often took excessive time to select people and by the time decisions were taken, the best experts were sometimes no longer available. Perhaps FAO's greatest advantage in comparison to bilateral aid lay in the advice it could provide for its field projects by its experienced technicians at Headquarters and regional offices and independent experts when necessary. The process was called 'technical backstopping' but FAO technicians sometimes gave priority to other administrative duties and devoted too little time to individual projects, particularly when they had dozens of projects to backstop. The problem was particularly that FAO had too many projects of a small size.

An increasing pool of technical experts was available in developing countries and FAO as well as other UN institutions had been under constant pressure to hire more experts from developing states both by the governments, its governing bodies and the

UN itself which increasingly represented the wishes of the majority.¹ While many recipient countries increasingly required short-term, high-level consultants, another major reason for numerous short-term projects, especially in UNDP, is that developing nations wanted their own nationals to be employed. This was a common pressure in all UN organizations and not a negative development if competent people were chosen. As discussed in the section on technical meetings, the best Third World experts were often not easy to identify and failed to keep abreast of the literature even when it was available to them. In general, developed country experts had more time and facilities to acquire recent knowledge.

Due to the reductions or unpredictability of UNDP funding since 1975 and deteriorating conditions, good professionals from some developed countries were increasingly reluctant to go to the field as FAO/UNDP experts for long term assignments as there was less job security and for some limited, or no, financial attraction.² In fact, the best experts from developed countries often went to work for bilateral aid and other multilateral organizations, such as the World Bank. Hence the availability of experts from developing countries (for whom even a two-year contract was financially lucrative in most cases, and an advantage to their national careers), responded to a need. Many developing countries were, however, not willing to release high-level specialists even for short-term assignments.

Problems have arisen with particular countries. Thus it was difficult for most Indians to obtain permission even to attend meetings. In spite of this, because of their

1. UN, *Joint Inspection Unit Report on Use of Consultants and Experts in the Food and Agriculture Organization of the United Nations*, FAO Council, Seventy-Sixth Session, JIU/REP/79.7, FAO, Rome, 1979, p. 6.

2. FAO, *Review of Field Programmes 1976-1977* (Rome, 1977), pp. 19-20.

large number, Indians, more than any other Third World nationals, have made a contribution to FAO's technical assistance. Some developed countries such as Canada also made it difficult for their good civil servants to serve abroad in bilateral or multilateral assistance. Sweden on the other hand encouraged foreign assistance. In many small developing nations, FAO and other UN organizations often recruited some of the most talented agricultural experts for full-time jobs.

The TCDC approaches in regional fisheries programmes in Asia, discussed in the case study on fisheries, have also become an increasingly important feature of field programmes in agriculture.

In connection with its new dimensions approach to increasingly involve national institutions and staff in its projects, FAO has been increasingly involving national personnel both as experts and national project directors. Such national staff continued to receive their national government salaries and, with few exceptions, receive no salaries from FAO. In 1981, approximately 144 operating field projects, mostly large-scale (over \$250,000 in external funding), were managed by national directors. In 1978, there were only 61.

In 1980/81, 20 percent of national directors were available only on a part-time basis.¹ There were, furthermore, few countries like India, China and Algeria, where civil servants were able to make a living on local salaries. Hence, it is precisely in these countries that most of the larger, FAO-assisted, projects had national directors.²

1. FAO, *Review of Field Programmes 1980-1981* (Rome, 1981)

2. FAO, *Review of Field Programmes 1984-1985*, p. 94.

Low salaries remained a problem in comparison to that of foreign expertise.¹ In addition, FAO has been integrating national project staff in project activities.

The involvement of national staff (known as counterpart staff) could ensure government involvement and improves the government capacity to continue project activities once international staff was withdrawn. In selected FAO evaluation reports from 1980-84, the performance of counterpart staff was reported to be good or satisfactory in 49 percent of all cases, compared to 72 percent for international staff.² The performance of counterpart staff was an important factor contributing to the success of project implementation and, for that matter, also for project impact. In the group of projects rated as having good outputs (number of trained personnel, field trials completed, etc.) and effects, 96 percent of the counterpart performance rated good or satisfactory. In poor quality projects, 85 percent were found to have unsatisfactory performance of counterpart staff.

In the limited cases where projects have been directly executed by governments, FAO has provided advisory services to help in project design and technical backstopping when requested by the government. This was initially provided in Hungary, Bulgaria and Poland and later in China and other developing countries. In Africa, and sometimes elsewhere, FAO staff engaged in projects usually continued to perform in an operational rather than an advisory capacity, sometimes even performing management duties when countries were short of staff.³

1. M.S. Swaminathan, 'Statement by the Independent Chairman of the Council' in *Verbatim Plenary Records of FAO Conference, Twenty-Second Session, Rome, 5-23 November 1983* (Rome, FAO, 1984), p. 52.

2. FAO, *Review of Field Programmes 1984-1985*, p.55.

3. Ergas, *An Evaluation of FAO's Technical Assistance in Planning*, p. 24.

The total number of long-term experts decreased from 1,658 in 1978, to 1,451 in 1987. Meanwhile, the number of short-term experts and consultants employed increased from 193 to 480 and, as previously stated, there had also been a trend toward engaging national experts. In 1987, there were only 130 projects out of 2,600 that were managed by national directors. The level in the quality of experts required was also higher, testifying to the improvement of national professionals in many countries. The larger number of qualified people in some recipient countries indicated the success of agricultural aid in general, including FAO's efforts.

Although the number of projects increased from about 1,300 in 1970 to around 2,600 in 1988, the number of experts and consultants decreased - from 2,100 in 1970 to 1,900 in 1988.¹ One explanation was that trained people in recipient countries started performing higher-level duties. The number of experts was decreasing while the number of projects was increasing; technical backstopping was inadequate, because there were not enough experts at Headquarters. In the period 1978-87, a general decline in the share of project personnel occurred while that of specialized equipment rose.²

Equipment

In many instances FAO, UNDP and other multilateral organizations including the regional development banks were in a far better position to introduce appropriate equipment than bilateral agencies, which merely provided the equipment their own countries manufactured. Donor nations tried to provide the equipment for which they

1. FAO, *Review of Certain Aspects of FAO's Goals and Operations*, p. 89.

2. FAO, *Review of Field Programmes 1982-1983*, p. 14.

wished to develop a market. The commercial marketing aspects of bilateral aid have often been regarded as a greater problem for recipient nations than the political leverage donor states exercised on the recipient nation.

Even with regard to projects funded by trust funds, donors exerted pressure on FAO to utilize their equipment and experts. While the Italians made it an informal arrangement for their increased trust funds, other countries such as Norway have more subtly indicated that they preferred their fishing vessels utilized for projects.

Because of the various different forms of machinery and other equipment donated by bilateral aid, countries could end up with a mixture of equipment difficult to operate and maintain. During the 1973 drought, Ethiopia received 700 different kinds of drilling rigs for water from donor nations. Ethiopia wanted to send two technicians abroad to be trained to operate drilling rigs but did not know where to send them as different rigs worked differently.¹

Like other UN agencies, FAO had no vested interest; hence it was in the best position to provide the most appropriate equipment at the cheapest prices if it did its job properly. FAO had a headquarters division to advise on machinery and tools available in all countries. It also had information on other forms of equipment from vehicles and fishing gear to typewriters, computers, refrigerators and other storage equipment for vaccines in the case of animal health.

But not always had the best equipment been ordered, as the following quotation indicates:

‘Nevertheless, custom has led FAO to buy its equipment in Rome. Quite often the buying of equipment was not carried out in the best possible way. It was done in a rather weird fashion, quite incomprehensible to others and I think it is high time that

1. Father Guion, Former President, Haili Selassie University, *Interview*, Addis Ababa, April 14, 1974.

developing countries, with the help of the country representative or the actual FAO representative himself, be given the freedom of choosing where the equipment is to be bought and the company from which it is to be bought from. The majority of the equipment bought by FAO for projects often comes from companies which have no representatives in the beneficiary countries. This is true for tractors. FAO has bought tractors from a firm which has no representation in the countries to which the tractors were sent and later on there was trouble because in a few years' time spare parts were needed and it was impossible to get parts in that country. Therefore, I think the final decision should lie with the beneficiary countries so that they can choose where the equipment is to be bought and what quality equipment is to be bought. FAO should not be the sole body to decide because there are several other factors that ought to be taken into account when buying equipment.'¹

This situation had no doubt improved; as at least FAO's policy in 1985 was that there should be an agent in the recipient country of the company from which FAO ordered the equipment, to arrange for spare parts among other problems. Provision of spare parts was often underestimated and maintenance in general was a problem. Often countries had no money for spare parts as it involved foreign exchange and neither bilateral nor multilateral aid provided maintenance and recurrent costs. While maintenance was increasingly included in development projects, its implementation was another matter, partly because training was lacking. Maintenance was in general not part of the Third World mentality unless private ownership was involved. In a few developing countries such as the Republic of Korea, Thailand and, to an extent, Morocco, maintenance has improved. In spite of the maintenance problem, FAO often opted for sophisticated equipment.

Transport was also a consideration. In the Asian region, for example, even if the same equipment existed cheaper in North America, transport might render the same equipment cheaper imported from Japan or Korea. In the case of bilateral aid, equipment was further shipped on the national carriers rather than on the cheapest

1. S. Jumas, [Statement] in *Verbatim Records of Meetings of Commission II of FAO Conference, Nineteenth Session, Rome, 12 November-1 December 1977* (Rome, 1978), p. 224.

carrier as would FAO. Appropriate machinery could furthermore be simple tools, manufactured within the countries themselves. Many countries, particularly in Asia, were increasingly manufacturing their own more sophisticated equipment and were also exporting equipment at cheaper prices. Brazil, for example, has emerged as an industrial power.

One of the most common forms of equipment for technical assistance projects was vehicles. Indian trucks could often be more appropriate than Canadian or American trucks for rough Third World roads and in addition were much cheaper. One of the most successful examples of technology transfer has been the adaptation by the Tata Industrial Group of the Mercedes Benz model of trucks to the rough roads, which were common in India and other Third World nations. However, it seemed that FAO had not used Indian trucks in countries other than India.

Levels of industrialization and mechanization varied greatly within countries and regions. In Africa the level of industrialization was low and there was little farm mechanization due to the abundance of labour; even animal power was not adequately utilized.

In Mali, ox-drawn machinery was the predominant form of mechanization. About 100,000 farmers owned at least one pair of oxen, while there were only about 300 large tractors in the country in 1980.¹

In most of Asia there was somewhat more mechanization, but in conditions of overpopulation, mechanization should not displace employment. Thailand has imported its medium size tractors but some of the implements used with them and

1. C. Uzureau, 'Possible Development in West Africa of Multifarm Use of Low-powered Tractors and Adapted Developments', in *FAO Panel of Experts on Agricultural Mechanization, Hanover, Federal Republic of Germany, 8-10 September, 1980. Summary of papers.*

small tractors were made locally. About 60 percent of the cropped area was tractor ploughed each year.¹ The statistics were similar for Egypt but in Egypt only about 3 percent of the land was arable. In Egypt, more land was gained for food production by introducing mechanization to replace animal power.

In spite of problems and shortcomings, FAO has made, and could make, an even greater contribution as countries sought to increase mechanization in their agriculture and more equipment was available.

Training

It was arguable that the most important aspect of FAO's projects has been its training activities, which have contributed to the cadre of the agricultural personnel within countries. Training was used here in the broad sense of both higher academic education and on-the-job training. In addition to counterpart training of nationals working with FAO experts and consultants, sometimes over a period of years, the definition of training activities used in this chapter included fellowships, study tours, courses, seminars, workshops, classes for farmers and other group activities.

Fellowships were two months or more in duration, normally undertaken by less senior government personnel. Study tours were less than two months in duration and undertaken in more than two places. While the value of fellowships was obvious, unless the trainee remained abroad, the impact of study tours was more questionable due to the short period spent in various places. They have been denigrated as 'sightseeing' tours, but for many personnel it was their first opportunity to visit a

1. C. Chakkaphak, 'Multifarm Use Machinery in Thailand', in *FAO Panel of Experts on Agricultural Mechanization*.

developed or another developing country. Experience suggested that most of the findings regarding training delivered by FAO, most of which was funded by UNDP, were also true of bilateral aid.¹

While most training occurred as part of the Field Programme within countries and regions, a limited number were trained under the Regular Programme in meetings and also as recipients of the André Mayer Fellowships.²

Training conducted by FAO has, however, been a minor part of training conducted by aid agencies. It was not possible for the true impact of the training delivered by FAO or other agencies to be precisely measured. Many countries that possessed limited, or no, trained manpower in the 1950s such as India and Indonesia and those in Latin America, had more than adequate manpower in 1985 and were able to provide experts to assist in other developing countries. This was the best measure of assistance collectively received from foreign aid agencies.

Both independently and with UNDP, FAO has, however, trained a considerable number of people in most countries during the decades studied. Training was a wide subject as all technical cooperation projects had a training element. No distinction was drawn between education and training as most efforts to increase agricultural personnel contributed to production in the long run provided the necessary policies and institutions exist.

In historical perspective, FAO's training activities began in 1947 with the training of 540 persons in 14 technical meetings and 9 fellowships awarded under a fund transferred to FAO from the UNRRA. Between 1951 and 1955, 800 trainees

1. FAO/UNDP, *Agricultural Training: Report of an Evaluation Study* (Rome, 1980), p.11.

2. Fellowships awarded in honour of André Mayer, who served as Chairman of FAO Executive Committee during the first years of its existence.

benefited from agricultural training centres and 365 fellows were awarded fellowships provided under FAO's Field Programme. The training activities continued to increase in number. It was estimated about 35,000 people received some formal training through FAO field projects in 1975-76.¹ By 1979, the first year for which a complete tabulation for group activities was undertaken, 47,096 trainees received training in 992 training activities.² In 1983, it was estimated that approximately 75,000 people benefited from training activities by FAO, not including fellowships and study tours; 12,000 of these were women.³ About 45 percent of training activities were undertaken in Africa in 1983, where the number of trainees was estimated to have increased from 13,000 in 1979 to about 28,000 in 1983.⁴ Between 1979 and 1985, an average of 800-850 fellowships was awarded annually.⁵

While these numbers were impressive, the effects of FAO's training activities, as with those of bilateral and other multilateral assistance, were in some instances superficial, especially after training courses lasting for periods of less than two weeks without follow-up. The assessment of outcomes was difficult with respect to farmers; some were trained, but others were merely exposed to new methods.

Training of Women and Peasants

Training was conducted not only at the professional, technical and vocational levels as in other sectors but also at the lowest producer level. While, in spite of its imperfections, training has contributed substantially to the number of trained

1. FAO, *Review of Field Programmes 1984-1985*, pp. 97-98.

2. Ralph Phillips, *FAO's Training Activities* (FAO, Rome) pp. 1-2.

3. FAO, *Review of Field Programmes 1984-1985*, p. 98.

4. FAO, *Review of Field Programmes 1984-1985*, p. 98.

5. FAO, *Review of Field Programmes, 1984-1985*, p. 100.

professionals; the work in training has not always contributed to increasing agricultural production and promoting the adoption of improved technology, especially by small-scale producers in developing countries.¹ Until the 1980s, in many countries, mostly well qualified professional and higher-level technicians, as opposed to personnel such as extension workers working more directly with farmers and fishermen, were trained. While fairly precise data have been collected for training activities at the professional and technical levels, at the vocational or farmer level, it was difficult to distinguish between people directly trained by FAO personnel and those trained by national personnel with advice and support from FAO.²

In spite of the fact that women in developing countries have always played a significant role in food production, until 1980 very little training of women was undertaken.³ During the 1970s it was estimated that women comprised fewer than 5 percent of all FAO trainees in field programmes. By 1982, this share had risen to 10 percent and in 1983 it had increased to 16 percent. By 1983, the number of women trained in Africa was estimated to be approximately one quarter.

This was, however, still a limited number where approximately 70 percent of agriculture was performed by women. The degree of access of women to training was, however, partially determined by the educational and employment policies of the developing countries concerned. Some projects did not involve women at any level and the very poorest women were excluded, apparently because they were not mentioned as a target group when the project was designed.⁴

1. FAO/UNDP, *Agricultural Training: Report of an Evaluation Study*, p. 10.

2. FAO, *Review of Field Programmes 1976-1977*, p. 34.

3. FAO, *Review of Field Programmes 1984-1985*, p. 99.

4. FAO/UNDP, *Agricultural Training: Report of an Evaluation Study*, p. 3.

An equally complex area was training peasant farmers, which had been undertaken in some FAO programmes such as FAO Fertilizer Programme and the Dairy Development Programme, both programmes cooperating with bilateral assistance. Although increasingly used, audiovisual technology was not adequately utilized in training peasant farmers to overcome illiteracy and language barriers in general.

Impact of Training

The problems and positive impact were similar with the UN as with bilateral aid. There was no follow-up to ensure that training was effectively utilized and often no comprehensive evaluation existed to determine whether people were properly trained. The technical experts who conducted the training may be good technicians but may not always possess the communication ability. Success in training, whether locally or abroad, depended upon having appropriate people to train who would remain in their jobs and hence become experienced. Trainers may be attracted into other occupations – English-speaking secretaries and taxi drivers in some developing countries earned more than recent university graduates in government service.

It was with regard to fellowships that the UN agencies have a distinctive advantage over bilateral aid in that they could send trainees to any nation, developing or developed and from any nation. In bilateral aid, fellowship holders were sent only to the donor nation. Bilateral assistance of some cases, however, had more resources devoted to fellowships. Fellowship holders were influenced by other factors than the technical training they received, such as management styles and concepts of

development. The countries they were sent to often benefited as the trainees, upon returning home, ordered equipment and maintained other links with the country in which they were trained. Trainees could, however, remain abroad to forward their careers in industrialized countries.

A survey in 1981 over the previous two-year period of 103 persons, two-thirds of whom were trained in developed countries, indicated that over 90 percent of fellows were applying the technical skills they had acquired through fellowships in their work.¹ The contribution included not only their increased performance but involvement with skills of colleagues. There were several cases where former fellows stated they could not utilize techniques learned in developed countries.

While FAO's contribution to training cannot be measured, most major agricultural institutes in most developing member countries have benefited to varying degrees. All soil institutes in developing nations, and some developed nations such as Bulgaria, have benefited by training provided by FAO/UNDP.

Many of FAO's projects were designed to create viable institutions within states, so that nationals could assume the duties of foreign technicians. As a review of its training states:

'The most significant contribution that FAO has made in the field of training during the past two decades has been its assistance to countries in the establishment of permanent facilities for agricultural education and training. Such assistance is still being provided to a number of them but it is worth noting that in 1975 and 1976, the scope of many of the projects was limited to advice and support for very specific areas of work or disciplines within established institutions, which were functioning by and large on their own. If more emphasis is now being placed on group training activities in FAO field programmes – many of which are for in-service or refresher training – it is perhaps justified to assume that the efforts of countries to provide basic

1. FAO, *Review of Field Programmes 1984-1985*, p. 101.

training for the cadres needed to staff their ministries and institutes are now bearing fruit.’¹

FAO training might be enhanced by collaboration with that of the World Bank and bilateral agencies. Bilaterals had the financial resources to bring in the professionals from other countries in a region to an FAO training workshop. FAO also conducted training at the regional level as discussed in the case studies and further in this chapter. This was also true for other UN agencies.

Training at regional and inter-country levels allowed the establishment of scientific and technical contacts between countries with similar problems, which could lead to further cooperation. Examples of common problems were desert locusts, trypanosomiasis in Africa, rehabilitation of the Sahel, salinity in the Near East, water management in South Asia, soil fertility in areas of shifting cultivation and exploitation of fishery resources.

During the 1980s (1980-1987), close to half-a-million people were trained through FAO field projects.² Training delivered by FAO had increasingly been focusing on Africa, while trainees in Africa numbered around 10,000 of 55,000 in 1980; they were around 28,000 by 1986.

IMPACT OF PROJECTS IN GENERAL

FAO evaluated its projects more for implementation rather than for impact. In 1980, FAO had the most comprehensive internal evaluation system of all the UN

1. FAO, *Review of Field Programmes 1976-1977*, p. 37.

2. FAO, *Review of Field Programmes 1986-1987*, p. 113.

agencies.¹ All major projects were subjected to an annual tripartite review.

Representatives of the recipient country, of the financing agency (UNDP or Trust Funds) and FAO examined the extent to which targets had been achieved, what differences had arisen and what alterations were called for.

A. Ayazi, Chief Evaluation Service, FAO, Rome, had argued for more emphasis on the impact of projects and less on the mere facts in implementation reports.² At the same meeting, Ayazi stressed the need for evaluation to identify the beneficiaries during the preparation stage of projects. He considered that small farmers had needs different from larger farmers and were themselves not a homogeneous group.

According to FAO Evaluation Service:

‘Any attempt to measure the progress of its field projects against common performance indicators, faces formidable difficulties. The projects concerned are distributed over 140 developing countries. Their content and approach differs widely. Performance and ultimate success depends, not only on FAO, but also on the actions and support of others, in particular recipient governments.’³

Projects varied in external inputs from \$5,000 to as high as \$8 million.⁴ John White identified foreign exchange as the one clearly identifiable and measurable benefit from technical assistance.⁵ Inputs by countries also varied too widely in content and concept to permit useful aggregation.

FAO evaluation further states that in most cases the effectiveness of technical assistance was an elusive concept, the results can be better seen or felt than

1. Earl D. Sohm, *Status of Internal Evaluation in United Nations System Organizations* (Geneva, Joint Inspection Unit, 1981)

2. A. Ayazi [Discussion] in B.E. Cracknell, ed., *The Evaluation of Aid Projects and Programs: Proceedings of the Conference organized by the Overseas Development Administration in the Institute of Development Studies, at the University of Sussex, 8 April 1983* (London, Overseas Development Administration, 1984), p. 42.

3. FAO, *Review of Field Programmes 1982-1983*, p. 39.

4. FAO, *Review of Field Programmes 1978-1979* (Rome, 1979), p. 8.

5. White, *The Politics of Foreign Aid* (London, Bodley Head, 1974), p. 189.

measured in tangible terms.¹ A change of attitude occurred; from the late 1970s onwards, projects were evaluated for their general impact on rural development; that is the benefit to small farmers, small-scale fishermen and forestry inhabitants. The evaluation at the end of a project was sometimes insufficient for such reasons as being too expensive or lack of baseline information (people problems at the beginning of the project). The best judges were the host governments and the direct beneficiaries of the project. The real benefit was the follow-up and development that occurs after the project terminates. FAO representatives make assessments but these must be treated with caution.

Considerable technology was transferred to institutes by expatriates but a problem arose in transferring from institutes to the field, according to FAO. Local extension services were almost always experiencing difficulties in functioning but their work was essential for practical results in the field. In the Fertilizer Programme, training methods for extension services have been developed since the Programme's inception in 1961.² As FAO Evaluation Services stated, many useful activities and outputs were not spread beyond the area of the project or embraced by government extension services. As pointed out earlier, there were shortcomings in many extension services in developing countries. Nevertheless, in his country, former Secretary of Agriculture in India, M.S. Swaminathan, said all FAO projects had done some good;³ he was the foremost authority on Indian agriculture.

1. FAO, *Review of Field Programmes 1978-1979*, p. 28.

2. FAO, *Training Activities under the Fertilizer Programme*, p. 9.

3. M.S. Swaminathan, Director-General of the International Rice Research Institute, *Interview*, Oxford, U.K., November 1982.

There were only a few solidly recorded and quantified 'success stories' in technical assistance in comparison to the large number of technical assistance projects completed. White gives four reasons why this was so.¹ First, there may be few which were suitable to record. Second, there were methodological problems of assessment. Third, the items involved were so small that the evaluation of each case was hardly justifiable. Evaluation of a trainee might cost as much as the training itself. Fourth, neither the donor nor the recipient may have an interest in impact. Having a project in one's department was good publicity for the recipient and having a project was also good publicity for the donor. These observations were certainly true of FAO, as also bilateral aid.

There were many recorded success stories. One was the Animal Health Institute in Cairo, which has supplied the Middle East and Africa with veterinarians. Critics have said that fewer, but better trained, veterinarians were desirable and that the quality of some of the vaccines produced by the Vaccine Production Department of the Animal Health Institute was poor.² Another success story was of food exports from Thailand (see Chapter 6).

A third success story was that of Herbert Brammer's initiation of a soil survey in Bangladesh.³ After he left for work in Zambia, the government of Bangladesh asked for his return to help identify areas of land appropriate for planting high-yielding rice and wheat. His training of young people for extension service was part of this

1. White, *The Politics of Foreign Aid*, p. 187.

2. World Bank, *Staff Appraisal Report, Arab Republic of Egypt: Minya Agricultural Development Project* (Washington, D.C., 1982)

3. H. Brammer [Statement] in *Verbatim Records of Plenary Meetings of FAO Conference, Twenty-First Session, Rome, 7-26 November 1981* (Rome, FAO, 1982), p. 37.

contribution. By the time of his second departure, some 20 percent of the rice crop was high-yielding.

In Brazil, FAO/UNDP began a successful forestry project in 1971,¹ reaching its fifth phase in 1985. The project established a chain of forestry education centres, which have trained hundreds of Brazilian foresters engaged in public and private forestry management. It also initiated the assessment of the country's huge forest resources and trained foresters for industrial management. In the 1980s the project had shifted to integrated rural development schemes in the poor, semi-arid areas in North-East Brazil. This project had been assisting in developing watershed management and reforestation.

The Brazil Project has led to several other impressive results of lasting impact. These included the establishment of two of the most modern tropical timber centres in the world at Brasilia and Manaus; installation of a network of national parks and reserves; and the establishment of a forestry and planning information system. The continuous inventory and monitoring of man-made and natural forests using remote sensing, satellite imagery and computerized data processing systems were installed and trials for large plantation programmes in the South, South-East, North-West and West-Central regions of Brazil were undertaken. Further achievements are discussed in the remaining chapters of this thesis.

EVALUATION OF THE TCP

The TCP was as easy to evaluate for impact as other field projects were difficult. Evaluation of TCP projects by an independent consultant for the Director-General

1. FAO, *Review of Field Programmes 1984-1985*, pp. 69-70.

revealed exceptionally good results and confirmed that follow-up was a natural sequel for the majority of TCP projects. The quick response factor was also appreciated.¹ For example, in 1978 the arrival within eight weeks of an expert in coffee rust eradication in Nicaragua and within a month of identification of an outbreak of the plague in the rice crop, the arrival of pesticides, sprayers and seeds in Laos, made a favourable impact on the food production of both countries. Similar good results followed an intervention of \$1 million to combat African swine fever and \$1.5 million for desert locust control in 1978. They helped avert major disasters and kept them from spreading to other countries. Similar examples can be quoted for other years. Government officials stated it was not only the timeliness of the TCP's response but the filling of crucial gaps in their requirements for assistance not available elsewhere.

The average time it took to start operations of TCP in the field from receipt of request at Headquarters was six months. However, steps were taken to shorten the time period to two and a half months. The degree of government involvement has also been greater than in non-TCP projects.

The developed countries benefited from TCP activities in that they wanted to see the needs of developing countries fulfilled and their experts filled most of the jobs internationally recruited. While the industrialized countries objected to the TCP in principal, they tolerated it because of its merits. They felt aid for technical assistance should be given through UNDP and remain voluntary rather than compulsory through FAO Regular Programmes, as the TCP was.

In 1985, an evaluation of 8 years of the TCP was undertaken. Since its inception in 1976, a quarter of the TCP's financial resources were absorbed by emergency

1. FAO, *Review of Field Programmes 1978-1979*, pp.32-33.

projects. Results were easy to identify and hence discussed here at length. The TCP has sometimes provided quick, but limited, assistance while other resources from the international community were mobilized. Examples include the following TCP projects.¹

In 1978/79, \$1.7 million was approved in ten projects to fight locusts in countries of Africa, the Middle East and Asia. About \$1.8 million was approved in 14 projects in 12 countries in Latin America for the control of African swine fever. In 1980/81, TCP assistance was given for an initial outbreak of rinderpest and in 1982/84 for a major outbreak of the disease. In total, \$7 million was allocated to 48 projects in 28 countries and to seven regional projects. Five of these projects provided the technical assistance necessary to prepare the African Rinderpest Campaign (discussed in Chapter 7) pending the mobilization of international aid. Most of the assistance provided consisted of equipment to prevent loss of vaccine and to resume production. Vaccines and vaccine production equipment and training for rinderpest control were granted. Also laboratory equipment and training for African swine fever was donated.

Emergency assistance was provided for the services of an expert for a year to prepare a programme to control the larger grain borer in Tanzania. The expert identified the necessary assistance and coordinated other assistance projects. This programme was continued through FAO/Trust Fund projects and bilateral assistance.

Other projects in Africa and Latin America controlled other pests such as army worms, or plant diseases, mealy bug, citrus greening disease, sigatoka nera and coffee rust.

1. S. Linner, W.M. Johnson and T.E.C. Palmer, *Report of the Evaluation of FAO Technical Cooperation Programme, Council of FAO, Eighty-Eighth Session, Rome 4-7 November 1985* (Rome, FAO, 1985), pp. 15-23.

After natural disasters, the TCP provided seeds, pesticides, veterinary medicines, vaccines and small equipment. After a cyclone in Fiji, artisanal fisheries were rehabilitated with fishing gear and boats. Assistance to fishermen was also given after natural disasters in Mauritius, Yemen P.D.R. and Colombia.

Besides emergencies, the TCP also has other categories. One of the most important is practical training at farmer, fisherman and forester worker level. In Sri Lanka, for example, the TCP supported the establishment of home gardening pilot schemes in two villages. Some women were trained in mushroom production and production groups were formed. Marketing of their produce was arranged and the project was expanded and multiplied throughout the country.

Projects may also complement a UNDP plan to train the manpower required for long-term UNDP projects such as inland fisheries in Kenya. One project began training activities for extension workers in Syria. It was followed up by other projects, financed by an Arab fund, then UNDP and, after that, by a World Bank loan.

There were other categories of TCP such as investment, formulation and programming missions as well as advisory services. Under formulation and programming missions, many projects for Italian assistance for agricultural mechanization in Ghana, Tanzania and Zambia were approved. There was also rural development in Mali, Chad, Niger and Burkina Faso.

Many emergency projects approved for rinderpest control in Africa included a consultant component to formulate large-scale projects for assistance to the Pan-African Rinderpest Fund or other assistance programmes.

Under the investment category, the potential for investment in aquaculture in Cuba was realized. Inland and coastal sites were selected and investment projects formulated nationwide for fish farming. The project was financed by UNDP and development expanded throughout the country.

There were of course hundreds of such projects, but a recurrent function was TCP's supply of seeds, mostly either after natural disasters such as floods and droughts or to produce and distribute higher-quality seeds. This has helped to enhance the agricultural capacity of several countries: Botswana, Chad, Ethiopia, Lesotho, Mozambique, Senegal, Uganda, Zambia, Bangladesh, Maldives, Nepal, Philippines, Colombia, Costa Rica, Cuba and Grenada.¹

One criticism of the TCP was that the Director-General, Saouma, allocated projects to obtain votes for his re-election. This was another reason which led some Western countries to urge that TCP be disbanded (as discussed earlier) and that all technical assistance should be given through UNDP.

Some problems have been reported with project implementation.² Recruiting experts and getting government clearance for them has sometimes caused long delays. Another problem has been delay in receiving timely delivery of equipment and supplies, especially for emergency projects. Delays in submitting terminal statements have adversely affected the impact of some projects.

1. Linner, Johnson and Palmer, *Report of the Evaluation of FAO Technical Cooperation Programme*, p. 97.

2. Linner, Johnson and Palmer, *Report of the Evaluation of FAO Technical Cooperation Programme*, p. 77.

When a TCP fits into an existing government programme or starts one, its impact is assured, provided it is effectively implemented. The TCP's focus is on ensuring the food supply and improved incomes of rural families in developing countries.

REGIONAL PROJECTS: INTERCOUNTRY, SUBREGIONAL OR REGIONAL BASIS

There was a rationale for regional projects.¹ First, strengthening economic links implied establishing technical cooperation among appropriate institutions. Second, regional projects allowed the undertaking of long-term, complex research, which might not be feasible or economic at the national level. Often national institutions have too few highly trained people and bringing them together in one place or in networks facilitated complex research. Third, wasteful duplication of work may be avoided. For small countries, the establishment of new research or training institutions may be too costly. Placing such countries within a regional or sub regional institution or project may render the venture more economic. Fourth, some problems could be dealt with more effectively on a regional level. Desert locust control, rinderpest, arid zones with nomadic population and deep-sea fisheries were obvious examples. Regional projects involved international agencies such as UNDP and FAO to overcome problems between countries. Finally, countries in some regions often had similar ecosystems, cultures, political and technical problems.

1. FAO, *Review of Field Programmes 1976-1977*, pp. 21-22.

FAO REPRESENTATIVES AND COUNTRY OFFICES

FAO representatives who were responsible for all FAO activities in the member countries where they were stationed made an important contribution.¹ They:

- i. made certain that FAO activities were consistent with national development priorities;
- ii. identified, formulated and appraised requests for technical assistance and emergencies;
- iii. reported on the food and agricultural situation in the host country;
- iv. monitored and reviewed FAO executed projects, advising staff;
- v. collaborated with the UN system and other donors;
- vi. participated in and helped arrange all other activities including public and specialist meetings and World Food Day.

FAO representatives were accredited to 105 countries with 19 accredited to two or more countries in 1989.² FAO representatives should have a broad range of experience in the UN system, aid agencies, national governments and other institutions in implementing field projects. They managed FAO country offices, comprising the representative, a programme officer and administrative personnel. This staff was normally not intended to deal with governments at the policy level.

An FAO country office had two basic missions. First, to plan and apply for the resources needed to carry out agricultural development projects in cooperation with officials at Headquarters. Second, to implement, evaluate and follow up projects.

1. FAO, *Review of the Regular Programmes 1986-1987*, p. 100.

2. *Review of Certain Aspects of FAO Goals and Operations*, p. 37.

Since they did not have appropriate professional resources, they shared these responsibilities with Headquarters personnel.¹

In the 1980s, debate still centered on whether or not the FAO representative might be replaced by a senior agricultural advisor in the UNDP Office and the FAO country office consequently abolished. Other agencies had such an officer in UNDP and needed no independent office. It was said that the country office isolated FAO from the remainder of the UN system while strengthening its relationship with the host government. It was unlikely to be discontinued even if it was much more expensive (some 20 percent of FAO Regular Programme Budget was consumed by FAO representatives) than an officer in UNDP. Moreover, most of the development assistance in agriculture no longer flowed through UNDP. WHO and UNICEF also had country offices.

The FAO representative worked for FAO and could consult any agency and the Minister of Agriculture. The senior agricultural officer was a UNDP staff member and therefore needed permission to talk to other agencies or the minister. The representative could sometimes arrange funding from bilateral agencies if UNDP could not fund a project.

According to the Group of Experts study, the country offices should be involved in UNDP Round Tables and World Bank Consultative Groups to aid co-ordination and other cooperation because these countries were basically agricultural economies.²

1. *The Geneva Group, Study A: FAO National and Regional Offices*, p. 25.
2. *Review of Certain Aspects of FAO's Goals and Operations*, p. 117.

REGIONAL OFFICES OF FAO

The regional offices varied widely depending on the region and the country in which they were located; the size of the region and diversity of development also affected the performance of the offices. The regions were Africa, Asia and the Pacific, Latin America and the Caribbean, North America, Europe and the Near East. In the 1970s and 1980s, the African Region was salient by reason of frequent food crises mainly due to drought and civil strife.

The most important activity of regional offices was preparation of the Regional FAO Conferences held between FAO Conferences. Each region had its own conference, which provided information to the Regular Programme of Work and Budget of FAO and FAO Conference. They also promoted coordination and cooperation. To underscore their importance, these conferences were attended by the United States which made a point of sending representatives with an understanding of Third World agriculture. The United States also had marketing interests in developing countries.

The offices did not execute projects but produced documentation and arranged meetings related to their regions. When they had the expertise, they did some technical backstopping, but regional projects were operated from Headquarters unless some responsibility was explicitly delegated to the regional offices.

The main functions of the regional representatives who direct the regional offices were to:¹

- i. represent FAO at regional level;

1. *Review of Certain Aspects of FAO's Goals and Operations*, p. 123.

- ii. maintain liaison with the regional bodies relevant to the work of FAO, notably the Regional Economic Commission;
- iii. keep the Director-General informed on regional conditions-formulation of policies and programming priorities;
- iv. organize and follow-up regional conferences and service FAO regional technical bodies with help from Headquarters.
- v. arrange cooperation among governments on common problems;
- vi. provide inputs into FAO unified regular programme of work;
- vii. provide technical backstopping and provide political support to FAO country offices;
- viii. coordinate public information at regional level.

The ILO and UNESCO had regional offices similar to FAO. The unique case was WHO which had six regional offices responsible for operation of projects while also providing technical expertise globally from its Headquarters in Geneva.

FAO INVESTMENT CENTRE

Investment support in the form of assistance in the preparation of funding of investment projects by the World Bank, other development banks and the IFAD was carried out by FAO's Investment Centre. The FAO/World Bank Cooperation Programme (CP) was the larger part of the Investment Centre. Since its establishment in 1964, 438 projects have been approved, for total investments of \$25,649 million in

1986.¹ During 1984, the Investment Centre was involved in identifying or preparing 172 projects in 71 countries.²

In 1970, the Investment Support Programme (ISP) of the Centre was formed to cooperate with lending institutions other than the World Bank. The ISP works with other multilateral institutions lending to agriculture such as the IFAD, the African and Asian Development Banks and national development banks.

At the end of 1986, 229 projects had been approved under the ISP for total investments of \$5,724 million.³ Twenty-four projects prepared with ISP assistance were approved for financing in 1986. During that year, the ISP worked on 63 projects compared with 61 in 1985. In 1986, 59 percent of the projects were in Sub-Saharan Africa.

The costs of the CP were shared with the World Bank covering 75 percent and with FAO covering 25 percent.⁴ In the ISP cost sharing for services rendered institutions reimbursed FAO with two-thirds of the cost while FAO bore one-third. These projects were not considered FAO field projects as FAO only rarely executed them.

FREEDOM FROM HUNGER CAMPAIGN

It was evident early on that food problems in the poorest and most populous regions of the world were not declining. One response, in 1959, was the Freedom From Hunger Campaign (FFHC), launched by the FAO Conference to mobilize

1. FAO, *Review of Field Programmes 1986-1987*, p. 26.

2. FAO, *Review of Field Programmes 1986-1987*, p. 25.

3. FAO, *Review of Field Programmes 1986-1987*, p. 27.

4. FAO, *Review of Certain Aspects of FAO's Goals and Operations*, p. 91.

national and international efforts to solve worldwide hunger. The Conference Resolution invited governments, specific national agencies and non-governmental organizations (NGOs) as well as religious groups, individuals and other private organizations to participate in the campaign. The FFHC was promotional as only a small number of its tasks were carried out by the campaign itself. From the beginning it was operated by national committees in which NGOs were the principle organizers. By 1965, projects valued at almost \$400 million were being, or had been, implemented. These had been financed by direct contacts between national committees in donor and recipient countries. Direct contributions to FAO amounted to almost \$10 million.¹

The campaign allowed for relations with industry such as the FAO Fertilizer Programme. Its designation was changed to the Freedom From Hunger Campaign/Action for Development (FFHC/AD). In its field programme, the poor were targeted to help them build up their own development organizations. The FFHC/AD assisted NGOs in developed countries to design projects for the Third World poor. These were financed by NGOs in developed countries. Between 1985 and early 1987, 76 new projects were approved for some \$4 million.²

CONCLUSION

FAO's provision of technical assistance began in 1947 when UNRRA transferred its outstanding agricultural programme over to FAO. Funds were soon made available for technical assistance to developing countries, as they became independent. FAO

1. *FAO: The First 40 Years, 1945-1985* (Rome, 1985), p. 127.

2. *FAO, Review of Field Programmes 1986-1987*, p. 11.

reflected their needs in ETAP and the Special Fund, which united to form UNDP in 1965. UNDP provided the main source of funds for FAO projects until 1983 when trust funds became the main source of funds for technical assistance.

As they become available, FAO also recruited Third World professionals as experts. The availability of trained agricultural personnel in developing countries in general testified to the success of training including that of FAO. Although FAO was in a position to supply the best experts and make available the most appropriate equipment, it did not always fulfill expectations.

Performances in FAO field projects were key image-makers, mobilizing government and public support. The ultimate aim of technical assistance has been to enhance the capacities of recipient countries themselves to carry out programmes of agriculture and rural development.

CHAPTER 6

THE OVERALL WORK OF FAO

The principal primary sources relied on in the following pages were:

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2. Saouma, Edouard, *Address of the Director-General of FAO at the Second Ordinary 1982 Session of the Economic and Social Council*.
3. *Review of Certain Aspects of FAO's Goals and Operations: Appendices to the Report of the Programme and Finance Committees*, FAO, Rome, 1989.
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5. FAO, *Review of Field Programmes 1986-87*, Rome, 1987.
6. *Basic Texts of the Food and Agriculture Organization of the United Nations*, 1980 edn., FAO, Rome, 1980.
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12. FAO, *Review of the Regular Programme 1984-85*, Rome, 1985.
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14. Hamdi Y.A. et al., *Report on Methodology of Azolla Preservation and Transport*, FAO, Rome and Agricultural Research Center, Giza, Egypt, 1980.
15. Phillips, Ralph W., *FAO: Its Origins, Formation and Evolution, 1945-1981*, FAO, Rome, 1981.
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17. FAO, *Review of Field Programmes 1980-81*, Rome, 1981.
18. FAO, *This is Codex Alimentarius*, 2d. edn., Rome, 1995.
19. FAO/UNESCO, *Soil Map of the World*, 10 vols., UNESCO, Paris, 1978.
20. *World Soil Charter*, FAO, Rome, 1981.
21. Mathieu, Michel, *FAO Fertilizer Programme: Its Chances of Success*, FAO, Rome, 1983.
22. FAO, *Review of the Regular Programme 1980-81*, Rome, 1981.
23. FAO, *Review of Field Programmes 1984-85*, Rome, 1985.
24. FAO, *Review of the Regular Programme 1978-79*, Rome, 1979.

INTRODUCTION

The political environment of FAO included competition for public resources, its place in the UN system, its relationship with NGOs and its outcomes in various aspects of agriculture. This chapter describes Director-General Sen's contributions to the debate with the Vatican on population control, as well as FAO's achievements in such fields as research, marketing, post-harvest food losses, the Codex Alimentarius, the Soil Map of the World, desertification and the World Soil Charter, fertilizers, pesticides, seed improvement, plant genetic resources and animal production. These were selected examples and by no means exhaustive of the work done.

ARMAMENTS AND AGRICULTURE

While Third World countries claimed they did not have the necessary resources to invest more in agriculture and industrialized countries maintained they diverted funds of their own to developing countries' agriculture, both groups expended much on armaments.

In 1960, developing countries accounted for 10 percent of world military expenditure, and by 1981 that had doubled. It was in the poorer countries that all of the rise in armed forces had occurred, reaching two-thirds of the world's total.¹ On a day in 1982 alone, U.S. \$1.37 billion was being spent on arms around the world. Six days of such spending would have provided the needs for development and agriculture in the developing countries for one year.²

1. Ruth L. Sivard, *World Military and Social Expenditures 1982* (World Priorities, 1982), p. 9.

2. *Draft for the Director-General's Proposed Interview with Yugoslav Television.*

‘No more than half of one percent of the world’s annual spending on arms, over 55 billion dollars, would suffice to pay for all the farm equipment needed to set the poorest, food-deficit countries on the path to self-sufficiency during the 1980s’.¹

The North’s sales of conventional weapons to the South were in 1979 increasing to represent 70 percent of all arms sales,² albeit most were to just a few countries.

While industrialized countries managed to reach only half of the target of 0.70 percent of their gross national product for development aid, they readily devoted 5 to 6 percent to arms.³ All the budgets of FAO combined from its establishment in 1945 to 1982 would cover barely half the cost of one nuclear Trident-type submarine.

FAO IN THE UN SYSTEM

FAO cooperated in food issues with most UN organizations in the UN system to varying degrees in areas of mutual interest. Of the founding agencies UNDP was the largest single source of funds for FAO field programmes, as discussed in the chapter on technical assistance. The United Nations Fund for Population Activities (UNFPA) and UNEP have also funded joint projects with FAO.

In the 1980s, WFP became active in establishing food reserves in addition to providing emergency food aid, food aid for vulnerable groups, and development projects where participants receive food in return for work. In 1987, food aid for emergencies comprised 70 projects worth U.S. \$271 million, while commitments for

1. *Message by the Director-General of FAO to the President of the Second Session of the General Assembly 1982*, FAO, Rome, 1982.

2. *North-South: a Programme for Survival, Report of the Independent Commission on International Development Issues* (London, Pan Books, 1980), p. 120.

3. Edouard Saouma, *Address of the Director-General of FAO at the Second Ordinary 1982 Session of the Economic and Social Council*.

development projects amounted to U.S. \$3600 million for 310 projects in December 1987.¹ FAO provided technical support for many of these projects on a reimbursable basis. FAO and WFP needed to cooperate farther in estimating food aid needs if food aid were to be received on time and prove effective. Until 1984, WFP was part of FAO's information and administration division.

WFP and FAO were two of four food agencies based in Rome. The other two, the World Food Council (WFC) and the IFAD were created as a result of the World Food Conference held in 1974. The WFC was the highest political institution in the UN system dealing with food aid and agriculture. It was not an operating agency but a forum for initiating ideas and reviewing the work of other international organizations with operating programmes.² It monitored the follow-up of the World Food Conference most of which was the responsibility of FAO. FAO did not appreciate having its work evaluated by another agency and a hostile relationship soon developed between FAO and WFC until G. Trant replaced M. Williams as Executive Director of the WFC in 1986. Under Trant, the WFC took on a much lower profile and harmony with FAO. Under the leadership of Williams, the WFC encouraged Third World countries to adopt national food strategies that would enable them to become self-reliant. The Director-General of FAO, E. Saouma claimed these food strategies were interfering with FAO's food security policy work at the national level. But FAO provided the WFC with information to function and to prepare papers for its annual meetings. To manage political food issues the WFC was

1. *Review of Certain Aspects of FAO's Goals and Operations: Appendices to the Report of the Programme and Finance Committees* (Rome, FAO, 1989), p. 58.

2. Martin Kriesberg, *International Organizations and Agricultural Development*, Rev. 1981, U.S.D.A., Office of International Cooperation and Development Foreign Agricultural Economic Report 131 (Washington, D.C., U.S.D.A., 1981), p. 21.

to hold annual meetings attended by ministers from finance, development, and planning as well as agriculture. But this failed as the food crisis abated in 1975-76 and in the 1980s representation was often downgraded to deputy ministers of agriculture and even ambassadors.

Relations between FAO and IFAD have been good. IFAD was established after the World Food Conference to fund projects for the poorest people in the poorest food deficit countries and in other developing countries. The Fund was to receive 58 percent of its finances from OECD countries and 42 percent from OPEC nations, but after the first installment, IFAD continually encountered funding problems, despite a favourable profile in the world press. FAO has joined IFAD in 20-25 missions per year in project preparation and identification, but IFAD projects were administered by cooperating agencies of which FAO was not one. FAO has exchanged information with IFAD and produced papers for it on an ad hoc basis.

There was more overlap between the United Nations Industrial Development Organization (UNIDO) and FAO than with any other agency. There has been overlap in areas of rural small-scale agro-processing and fish processing, including cottage industries; manufacture of farmer's hand tools; fishing boat design and construction; animal vaccines; biotechnology (relating to agriculture and food processing); and pesticides.¹ FAO had proposed establishing a joint FAO/UNIDO Division for Agro-Industrial Development to sort out which agency should undertake an activity or whether the Division should.

FAO had a Joint Division of Nuclear Techniques in Food and Agriculture with the IAEA. The division had responsibility for nuclear applications in food, agriculture

1. *Review of Certain Aspects of FAO's Goals and Operations*, p. 62.

and biotechnology, and radionuclide contamination of food. IAEA funded nearly all the activities but they were carried out in the names of both agencies.

In order to succeed in agriculture and rural development FAO must work closely with other UN organizations, particularly UNICEF, WFP, UNFPA, WHO and the ILO.

The main area of cooperation between FAO and UNICEF has been in applied nutrition such as food/nutrition surveillance at the country level and nutrition issues in Africa. There has been some duplication in the areas of nutrition education and home and school gardens.

ILO and FAO have both been concerned with employment in rural areas. FAO has been concerned with employment in the context of rural development including the choice of appropriate technologies. Meanwhile, ILO has been concerned with general employment conditions, including agriculture. It protected casual labour while FAO strengthened landless labour organizations.

FAO has even more in common with WHO: ensuring adequate nutrition, animal health problems, and food and environmental contamination problems. Collaboration included the Codex Alimentarius Commission, discussed below in this chapter; the Joint FAO/WHO Expert Committee on Food Additives; the Joint FAO/WHO Consultative Group on Food and Nutrition Policies; the Joint FAO/WHO Reference Laboratories in selected zones at the global and regional level; and the Joint FAO/WHO Committee of Government Experts on the Code of Principles concerning Milk and Meat Products. There were also many examples of cooperation on an ad hoc basis in animal and plant production, food irradiation and hygienic aspects of fish

processing and marketing. In general, WHO has been much more decentralized in its operation than FAO.

UNESCO has cooperated with FAO in projects on agricultural education, while cooperation in trade is discussed below in this chapter in the section on 'FAO's Role in Trade'. A persistent lack of coordination between most of these agencies was largely the result of the failure of many member states themselves to coordinate their positions for the agencies in their capitals. Thus contradictory instructions were given by delegations to the various agencies, sometimes assigning the same duties to different agencies.

FAO RELATIONS WITH NGOs

It was realized early that food deficits in the poorest and most populous regions of the world were accumulating. Thus in 1959, as discussed above, the FFHC was launched by the FAO conference to mobilize national and international efforts, governments alone being inadequate for such an immense task.

It was later known as the Freedom From Hunger Campaign/Action for Development (FFHC/AD). In its field programme the poor were targeted to help them build up their own development organizations. Also, FFHC/AD assisted NGOs in developed countries to design projects for the rural poor.

The finances came from governments, multilateral institutions, and charities such as the American Freedom from Hunger Foundation, the Church of Denmark, Brot für die Welt, etc. The campaign allowed for relations with industry leading to the FAO Fertilizer Programme.

In Latin America FFHC/AD activities cooperated with existing programmes of Asociación Latino-Americana de Organismos de Promoción, a network of NGOs which planned and implemented sub-regional TCDC programmes.¹ For example, in 1982 a series of projects on artisanal fisheries was designed in Colombia, Ecuador and Peru, of which eight were founded through FFHC/AD. In Argentina, Chile, and Uruguay, expertise was provided by FFHC/AD for credit programmes for small farmers.

Between 1985 and early 1987, 76 new projects were approved for some U.S. \$4 million worldwide.² The FFHC/AD published two bi-monthly publications in English, French, and Spanish. The main focus of the bulletin *Ideas and Actions* was rural development from field experience; nearly 25000 copies were distributed free of charge. The other publication, the *Development Education Exchange Papers*, reviewed material on food, agriculture and development with a developing country orientation.

The relations of FAO with NGOs exceeded the FFHC/AD. They mainly took the form of consultation with technical committees and special meetings. The NGOs had observer status, which enabled them to participate in and address the Conference and other activities and to submit written observations. There were three categories of consultative status: consultative status, specialized consultative status and liaison status.³ The first was conferred on organizations with an international remit; the second when FAO and governments considered the organization's views on policy

1. FAO, *Review of the Regular Programme 1982-83* (Rome, 1983), p. 101.

2. FAO, *Review of Field Programmes, 1986-87*, p. 11.

3. *Basic Texts of the Food and Agriculture Organization of the United Nations*, 1980 edn. (Rome, FAO, 1980), pp. 169-180.

issues to be of particular interest. Liaison status was designated when the organization was in a position to provide practical assistance.

On 1 August 1985 there were 17 NGOs in the consultative status category including the International Council of Women and the League of Red Cross and Red Crescent Societies.¹ There were 51 in the special consultative status category mainly comprising scientific or vocational and regional organizations. In the liaison status there were 105 scientific, trade and other organizations. The NGOs represented in Rome and their counterpart FAO divisions generally convened three or four meetings a year at the FAO headquarters. Also, as a follow-up from the WCARRD, integrated rural development centres have been established at the regional level to promote dialogue and cooperation between governments and NGOs.

POPULATION CONTROL

B.R. Sen as Director-General of FAO pointed out the relationship between population growth and hunger – the social and political implications that the rising rate of population growth presented.² Until then the population problem had been regarded mainly for statistical study and professional demographers in the UN Population Commission did not regard it as their duty to raise such issues. Meanwhile, the UN General Assembly kept itself at a distance for fear of offending religious sensitivities regarding birth control. For Sen, population control was an integral part of development strategy and necessary to increase food production. But Sen regarded population control as the duty of others, as FAO had its duties outlined

1. Sergio Marchisio and Antonietta Di Blase, *Food and Agriculture Organization (FAO)* (Dordrecht Martinus, Nijhoff Publishers, 1991), pp. 217-218.

2. B.R. Sen, *Towards a Newer World* (Dublin, Tycooly International Publishing, 1982), pp. 279-280.

in its Constitution. His successors, Boerma and Saouma, agreed with this view. On the other hand, FAO had brought the population problem to the attention of the international community¹ and its role continued to be that of communicating the problem.

Sen believed measures to implement population control had to be practised alongside measures to increase food production. Most national family planning programmes were making little progress among poor populations because there was little to encourage them to practise birth control. Whereas his predecessors had been unwilling to do more than draw attention to the failure of food production to keep pace with population growth, Sen sought ways of promoting discussion of the implications of this situation.

He had Arnold Toynbee deliver the first McDougall Memorial Lecture at the opening of the Ninth FAO Conference. In his lecture *Population and Food Supply*, Toynbee raised the moral question as to the true end of man. His answer was that 'living human beings, whatever their number, shall develop the highest capacities of their nature... and what we should aim at is the optimum size of population for this purpose in the economic and social circumstances of each succeeding generation.'²

The second McDougall Memorial Lecture was given in 1961 by John D. Rockefeller III. His address explored the relationship between 'people, food, and the well-being of mankind.' Birth control was so controversial, he pointed out, that governments were reluctant to even examine their demographic situation. Population

1. Richard Symonds and Michael Carder, *The United Nations and the Population Question 1945-1970* (New York, McGraw-Hill, 1973), p. 169.

2. Arnold Toynbee, *Population and Food Supply: McDougall Memorial Lecture, 1959* (Rome, FAO, 1959).

growth, he stated, 'is second only to the control of atomic weapons as the paramount problem of our day.'¹

At the 1963 World Food Congress, Toynbee warned of the failure to feed mankind unless couples everywhere engaged in regulating births but his plea for population stabilization did not appear in the final report. It did, however, include a reference to the 'explosive growth of population.' B.R. Sen concluded the Congress by observing that man must be responsible in his behaviour to himself and society: the world as a whole may have to play a more direct role in assisting family planning measures. Significantly, his remarks were not included in the report of the Congress.

In November 1964, addressing a Roman Catholic audience at the International Eucharistic Congress, Sen asked whether the world could turn its face away from family planning when the alternative was starvation and death.² In March 1965, he insisted that the situation called for the adoption of population stabilization as an urgent priority in his address to the UN Population Commission.³ Sen thereby entered into a dialogue with the Vatican.

In an address to the American family planning association Planned Parenthood – World Population in October 1966 he admitted that food production from land and water could be greatly increased but measures for any major increment were still in the realm of research and that the adoption of methods substantially to increase food

1. J.W. Rockefeller III, *People, Food and the Well-Being of Mankind: McDougall Memorial Lecture, 1961* (Rome, FAO, 1961).

2. B.R. Sen, 'Freedom from Hunger – Challenge of the Century: address delivered at the Plenary Session of the 38th International Eucharistic Congress, Bombay, 26 November 1964,' in *Food, Population and Development* (Rome, FAO, 1965), p. 8, cited in Symonds and Carder, *The United Nations and the Population Question, 1945-1970*, p. 130.

3. B.R. Sen, 'Text of an address to the 13th Session of the Population Commission, 24 March 1965,' *Food, Population and Development*, p. 30, cited in Symonds and Carder, *The United Nations and the Population Question, 1945-1970*, p. 130.

production were conditioned by social and economic factors. A continuation of present trends in population growth could lead to a situation where the unborn face a conflict with the right to a worthy standard of living when they are born.¹

Director-General Sen managed to take a bold stand without antagonizing the Catholic Church on an issue which, he noted, until then had been so controversial that it could not even be mentioned in Rome.²

Relations with the Vatican

Pope John and Pope Paul both appreciated Sen's efforts to eradicate hunger.³ Pope John praised FAO on the launching of the FFHC in his message to Sen and again in his Encyclical *Mater et Magister*. He sent a lengthy message to Sen on the occasion of the World Freedom from Hunger Week in March 1963. Modern transportation, he stated, made it possible for those with abundant natural resources to share food with those lacking natural resources to produce food. What was 'missing is the organizing and coordinated intelligence and will' that would ensure a fair distribution. It was also the case that developing countries were not exploiting their own resources.

Before the World Food Congress in June 1963, Sen wrote to Pope John pleading with him that the rate of population growth must be slowed if incomes were to enable 'every citizen to live in conditions in keeping with his human dignity.' But Pope John

1. B.R. Sen, *Text of the Address at the 50th Anniversary Banquet of Planned Parenthood – World Population*, 18th October 1966, FAO/M1/5182 (New York, 1966), cited in Symonds and Carder, *The United Nations and the Population Question, 1945-1970*, pp. 130-131.

2. Symonds and Carder, *The United Nations and the Population Question, 1945-1970*, p. 131.

3. Sen, *Towards a Newer World*, pp. 161-169.

died shortly afterward and Sen believed that, if he had lived, the realities of hunger would have persuaded him to give more positive guidance to the world.

Pope Paul at first followed the spirit of Pope John but after some time became more traditional in his attitude to population control, while often blessing FAO for its work for the hungry. In 1967, Pope Paul in his Encyclical *On the Development of People* stated: 'It is certain that public authorities can intervene within the limit of their competence, by favouring the availability of appropriate information and by adopting suitable measures, provided that these be in conformity with moral law and that they respect the rightful freedom of married couples.'¹

Sen gave a press conference praising the Encyclical because he thought each country could have its own moral law. The Vatican the following day clarified its statement saying that there was only one moral law and that was the natural law. Any government birth control programme should respect the Catholic ban on all artificial forms of birth control. Though much criticized in his time, history was to prove Sen right. Though the percentage of mankind suffering hunger became less, the absolute number of hungry increased because of population growth.

FAO AND RESEARCH

FAO did not conduct research but has encouraged national and international research. The only exceptions to this were the research unit, the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture, and also the socio-

1. Sen, *Towards a Newer World*, pp. 167.

economic and policy research involved in the Regular Programme. Otherwise, FAO did not have the necessary facilities to conduct biological and physical research.¹

Unlike other UN agencies, the IAEA ran or supported research centres and scientific laboratories in Vienna and Seibersdorf, Austria, Monaco and Trieste, Italy. Most UN agencies like FAO did not function as research bodies but networked, encouraged research and connected scientists and intellectuals. However, they have produced many analyses and documents which have been instrumental in moving research forward. UNESCO has had a special role in the context of research, compared to other UN agencies, given its intellectual mission.

Aid to agricultural research rose in the Third World sevenfold in real terms from 1971 to 1980.² FAO has been cooperating with the Consultative Group on International Agricultural Research (CGIAR) and promoting regional and interregional research networks as well as supporting national research. The importance FAO attached to research was such that the only new division established within the decade 1975-1985 was the Research and Technology Development Division established in 1983 by the FAO Conference.

Between 1961 and 1977, FAO was involved in 615 research projects and sub-projects at the national level.³ Two cases may be cited: in Kenya research support had been given to the growing of sorghum and millet, horticulture, date cultivation, irrigation, sheep and goat production, tick-borne cattle diseases, and agricultural equipment. Research support included meetings, training, assistance to cooperative

1. FAO, *Review of the Regular Programme 1984-85*, (Rome, 1985), p. 161.

2. FAO: *The First 40 Years, 1945-1985* (Rome, 1985), p. 47.

3. FAO: *The First 40 Years, 1945-1985*, p. 47

network development, advisory missions and publications; and in Egypt, a small grant enabled the development of the utilization of blue green algae and azolla for increasing soil fertilizer.¹

In the early 1970s, there were only four international agricultural research centres created and mostly financed by the Ford and Rockefeller Foundations. The success of the International Centre for Maize and Wheat Improvement (CYMMYT) in Mexico with wheat and maize and the International Rice Research Institute (IRRI) with rice in the Philippines resulted in this form of international research being strengthened. This resulted in the establishment of the CGIAR in 1971 with FAO participating in the decision. The CGIAR was co-sponsored by FAO, UNDP, and the World Bank and increased to 13 institutes by 1985. One institute, the International Board for Plant Genetic Resources, resided in FAO and was partly serviced by the Organization. The CGIAR secretariat was provided by the World Bank while FAO provided the Group's Technical Advisory Committee (TAC), which identified gaps in research. The CGIAR was the coordinating body and raised finance for their support. In 1985, the centers received about U.S. \$170 million through the CGIAR.

The CGIAR has enabled the establishment of long-term research programmes that were beyond the resources of individual countries. The Group was comprised of 44 donor governments and organizations, and 10 developing countries nominated by the FAO Regional Conferences. Not only were the centres evolving, they were receiving increased support from national research institutes.

1. Y.A. Hamdi et al., *Report on Methodology of Azolla Preservation and Transport* (Rome, FAO, and Giza, Egypt, Agricultural Research Center, 1980), 36 pp., and M.N. Alaa El-Din, S.N. Shalan, and Y.A. Hamdi, *Report on the Utilization of Blue Green Algae for Increasing Soil Fertility* (Giza, Egypt, Agricultural Research Center, 1984), 46 pp.

The concept of having research centres for plant breeding was conceived by Norman Bourlag when he was on an FAO mission (as working visits to countries were called) to Libya. He proceeded to establish a group that became CYMMYT, leading to the establishment of the CGIAR.

Promoting research networks has been given priority by FAO. The most extensive of these networks has been the European System of Cooperation Research Networks dealing with ten separate networks and established in 1974. There were 32 sub-networks and over 400 institutes in 50 countries participating.¹ The ten separate networks dealt with olives; maize; sunflowers; durum wheat; soybeans; animal waste; pastures; sheep and goats; trace elements in soils, plants and food; and the impact of pesticides on the environment. Research in developed countries thus also benefited by FAO's efforts as well as the Third World.

FAO'S ROLE IN TRADE

The Commodities and Trade Division of FAO and its predecessors carried out pioneering work on problems arising from international trade in agricultural commodities.² It has facilitated international cooperation by making commodity projections, preparing the necessary commodity reports and bulletins for intergovernmental cooperation. It also prepared guidelines for international action in trade policy. The work of independent commodity councils was not duplicated. The Division kept the situation and outlook for all the main agricultural commodities

1. *FAO: The First 40 Years, 1945-85*, p. 48.

2. Ralph W. Phillips, *FAO: Its Origins, Formation and Evolution, 1945-1981* (Rome, FAO, 1981), p. 121.

under regular review. Information was gathered, analyzed, and the results published in its annual *FAO Commodity Review and Outlook* as discussed in the section on statistical information in Chapter 3 on FAO Information Activities. National and international policies were dealt with regarding grain, meat, oilseeds, rice, jute, sisal, tea, wine and other vine products, and citrus fruits among other products; FAO had special expertise for tropical timber and jute. Collaboration between FAO and the United Conference on Trade and Development (UNCTAD) led to the formation of the International Tropical Timber Organization and the International Jute Organization. Though the *Review* was geared to developing countries, its data were widely used in the developed countries.

FAO did all the work that led to the Cocoa Agreement in the early 1970s, but similar support for tea did not lead to any agreement. The organization undertook commodity projections and policy implications. For example, the Port of Rotterdam sought projections of EEC imports and shipping lines about prospective growth of trade between Latin America and Europe for specific commodities (bananas was one case). Requests were also received from planning ministries.

FAO has a network of intergovernmental groups which report to its Committee on Commodity Problems (CCP) for commodities for which there were no formal international agreements, including bananas, tea, various hard fibres, oilseeds, grains, rice, meat, citrus fruits, and wine and other vine products. The groups provided a forum for the exchange of market information with UNCTAD and others and assessment of developments. In the cases of jute, kenaf, sisal and abaca, informal arrangements, including prices to stabilize markets, were developed. For others, such

as oilseeds, rice and meat, voluntary guidelines for international trade have been worked out. FAO also dealt with surplus disposal problems, through the CCP's Consultative Sub-Committee on Surplus Disposal.

FAO has cooperated with UNCTAD. Since 1976, FAO's involvement in UNCTAD's Integrated Programme for Commodities had included the joint preparation of studies on individual commodities and the design of possible market stabilization arrangements. FAO helped individual countries implement their commodity policies – 40 to 50 projects from 1977 to 1983.

It provided frequent technical support to the GATT Secretariat and Contracting Parties and cooperated with GATT regarding trade problems of least developed countries, furnishing a great deal of technical support to its Uruguay Round.

FAO has stressed two major problems of trade. Trade policies of developed countries which imposed high tariffs on developing country agricultural products were the main factor constraining the latter's exports. Secondly, the industrialized countries subsidized their agricultural products such that the poorer countries could not compete in terms of price; subsidies to agriculture in Europe and the United States equalled several times the funds given to the poor countries as aid.

Meanwhile the price of most commodities exported by developing countries were the same in 1985 in real terms as they were 30 years earlier. The value of world trade dropped by over 6 percent in 1982, with the prices of many basic commodities dropping to their lowest levels in real terms in half a century.¹ The decline in the value of world exports in agriculture, fishery and forestry products was even steeper. Meanwhile, loss in export earnings was even greater for the developing countries than

1. FAO, *Commodity Review and Outlook 1983-84* (Rome, 1984), p. iii.

the developed. In 1982-83 many low-income food-deficit countries had to set aside one sixth of their foreign trade receipts to purchase food imports. For some, this amounted to over 40 percent of receipts.

MARKETING

Marketing was defined as the business activities associated with the flow of goods and services from production to consumption. Agricultural marketing began on the farm with the planning of production to meet specific demands and market prospects and is completed with the sale of the fresh or processed product to consumers, or to manufacturers where materials for industry were involved. Marketing provided an incentive to grow produce for export.

Newly-independent countries nearly all sought marketing advice from FAO. From general marketing to more specific areas such as fruit and vegetables, livestock and meat, and grain were the common requests for assistance. Marketing and farm supply work has been focused on small farmers and on ensuring the necessary production inputs to farmers, especially in developing countries. In the late 1970s, increased attention was paid to market problems related to post-harvest systems of staple food crops and to government policies related to the establishment and replenishment of reserve food stocks as part of national food security programmes.¹

John Abbott who was Chief of Marketing in FAO for 16 years provided some examples of success stories. One was increased export of fruit and vegetables from Africa and the Caribbean to Northern Europe and North America in the 1970s and

1. Phillips, *FAO: Its Origins, Formation and Evolution, 1945-1981*, p. 110.

1980s.¹ FAO's advisers had played a significant role in this increase, benefiting both developed and developing countries. The FAO Marketing Group provided advisers to design new wholesale markets for many Latin American, Asian, and African cities.² For a number of large cities - Baghdad, Beirut and Tehran - plans for new wholesale markets were produced but never implemented.

The time between preparation of plans, executing feasibility studies and contracting a wholesale market project could be long, as exemplified by Malta.³ Trading had been carried out in houses in the old congested part of the city and an abandoned oilfield was chosen as a new site at no cost. A Dutch specialist with many years of experience in fruit and vegetable marketing was assigned to the project for one year, which he finalized in less time, but nothing was done for ten years. Then the market did begin functioning and the adviser received a medal at the opening ceremony.

In the late 1970s, with advice from FAO, twenty model producer markets were established in Brazil to link into the marketing system farmers isolated from outlets for their produce: local managers were employed and traders were encouraged to attend regularly. These markets induced parallel development: access roads and communications were improved, bank, rural credit and extension offices were established; and farm supply shops were opened. Furthermore, produce was

1. John Abbott, *Politics and Poverty: a critique of the Food and Agriculture Organization of the United Nations* (London, Routledge, 1992), p. 14.

2. . Abbott, *Politics and Poverty*, p. 150 and FAO: *Review of the Regular Programme 1980-1981* (Rome, 1981), pp. 183-195.

3. Abbott, *Politics and Poverty*, p. 150.

redirected toward consumer centres of the interior, avoiding transport to wholesale markets and back again, resulting in increased income to producers and consumers.

Benefits that accrued to semi-subsistence farmers and fishermen from effective marketing included tea in Kenya and milk and shrimp marketing in India. The Kenya Tea Development Authority ran tea processing plants that provided a market for 138,000 small growers above the average price. Also in Kenya, the Mumios Sugar Company provided 28,000 growers and their workers with an improved income. Thousands of cattle owners have benefited from small private and large cooperative milk marketing in India. Of particular interest has been the programme which moved animals supplying the milk for Bombay out of the city and marketed their milk cooperatively. A training programme for people from other countries was attached to this programme.

Landless people could make a living by raising poultry with chicks and were provided with credit to build chicken houses. Drugs and veterinary services were included in the Charoen Pokphan business in Thailand which was marketed in Japan.

Assistance to meat and livestock marketing was also given first to Latin America and then to Africa.¹ Slaughterhouses were established with the location depending on whether meat or animals were to be moved and transport of meat developed with refrigerated trucks, stores and retail outlets. Moving animals in Mali on foot to the Ghana border and transporting them from there by truck to Accra was U.S. \$22 per head more profitable than slaughtering in Mali and sending the carcasses by air.²

1. Abbott, *Politics and Poverty*, p. 151.

2. Abbott, *Politics and Poverty*, p. 152.

FAO's assistance in the marketing of grain dated from its beginning. In the 1950s FAO had advisers in Columbia, Guatemala, Jordan, Iraq and Malaysia. This was followed by assistance to many African countries and the Asian region, it arranged an Association of Food Marketing Institutions to exchange training and experience. The Association was a parastatal body assigned capital to acquire storage and authorized to obtain bank finance to buy and hold stocks of grain under government guarantee. Although it was cheaper to use existing grain wholesalers as agents, this would not guarantee that the small farmers received the minimum target prices and the Association often had to establish its own buying stations in rural areas. About twenty countries were helped to develop a mechanism that could provide growers with an equitable price. By evening out price volatility, it helped consumers during poor harvests and in time of famine.

As these were expensive operations, FAO arranged that initial stocks be granted by WFP and be replenished by it when released to relieve famine. The cash income of millions of peasants could be increased by a quarter or a third and thousands of lives thus saved by marketing in the Third World.¹ FAO played its part in this development.

POST-HARVEST FOOD LOSSES

Field operation began in 1978 for the Special Action Programme for the Prevention of Food Losses (PFL). The PFL and a special account to provide initial funding were approved by the FAO Conference at its 19th session in 1977. In the

1. P. Bowbrick, *Practical Economics for the Real Economist* (London, Graham and Trotman, 1988), cited in Abbott, *Politics and Poverty*, p. 157.

Third World post-harvest losses of food grain have been estimated at 10 percent; losses of roots and tubers from 10 to 20 percent; for fruits and vegetables from 10 to 30 percent. The aggregate loss from pre- and post-harvest factors was estimated at about 40 per cent for all agricultural production: pre-harvest losses were those occurring between sowing and harvesting and post-harvest losses were those occurring between the farmer's field and the final consumer, both in quantity and quality. Projects included improving farm and village storage structures; designing, constructing and managing pilot warehouses; providing small-scale grain driers; improving processing facilities; providing rodent control; and training at all levels in all aspects of post-harvest loss reduction. Local materials were preferentially to be used.

From its initiation in 1978 to the end of 1982, the resources of the programme totalled U.S. \$56.2 million, but only U.S. \$30.2 million had been allocated to the 108 PFL projects undertaken.¹ Of these projects, 88 had been completed or generated some outcome, all in the field of staple foods - cereals (rice, maize, wheat, sorghum and millet), pulses, and roots and tubers; in 1984-85 biennium fruits and vegetables were added to the list.

Examples of PFL projects² included one in north-west Cameroon where post-harvest losses were estimated to exceed 10 percent of maize crops. It assessed the loss in 15 villages and demonstrated how with simple techniques the loss could be halved. Reducing post-harvest losses in rice was the target of projects in many countries in Africa and Asia, although no report was made on how effective or widespread their

1. FAO, *Review of the Regular Programme 1982-83* (Rome, 1983), pp. 239-253.

2. FAO, *Review of the Field Programme 1980-1981* (Rome, 1981), pp. 67-68.

impact was. In China, a PFL project assisted in the selection of small-scale cereals drying equipment for testing and demonstration in reducing post-harvest losses of wheat, maize, and soya-bean. PFL projects dealt with farm and village-level storage, whereas central storage was funded by the Food Security Assistance Scheme (FSAS). Such projects demonstrated the benefits from small, inexpensive improvements in sanitation, crop handling, pest control and traditional storage facilities,¹ but capital intensive, sophisticated technologies were nevertheless often requested. FAO had considerable original knowledge in this field as some projects had been undertaken since early in its technical assistance practice.

FOOD STANDARDS

International organizations had an important function in setting standards in a way only they can. There was no substitute for FAO's work on food standards. The joint FAO/WHO Codex Alimentarius was established in 1961 to set international food standards and by 1985 it had produced standards that included about 180 food commodity standards and over 30 practice codes for the manufacture and handling of food products.² It evaluated food additives as well as contaminants such as lead, mercury and aflatoxins, and determined maximum residue limits in food for over 1,600 pesticides.

FAO assisted its members to adopt Codex standards Codex Alimentarius has had a great impact on the quality and safety of the world food supply. It has set standards for food manufacturing, safety and quality worldwide and has contributed to the

1. FAO, *Review of the Field Programme 1980-1981*, pp. 38-39.

2. FAO: *The First 40 Years 1945-1985*, pp. 75-77.

increase in world food trade. The Codex enabled the removal of non-tariff trade barriers created by differing national food legislations.

Due to FAO experts who trained local Thais from 1984, Thailand's food exports increased from U.S. \$2,500 million in 1985 to U.S. \$4,800 million in 1989, contributing significantly to Thailand's 10 percent economic growth rate in that period.¹ Earlier Thai food exports had been rejected by international markets.

FAO provided 80 percent of the funds to cover Codex Alimentarius while WHO covered 20 percent. Host countries funded the committees on specific foods. In mid-1985, members of the Codex Commission, represented over 97 percent of the world population.

In Western countries, Codex has become the main reference. Developing countries wishing to sell foods must abide by Codex standards. Failure to abide by these accepted standards has resulted in shipping by these countries being rejected. The Codex secretariat provided lists of countries accepting a given standard, so exporters knew where they could ship products that conformed to Codex.

But because they were approved does not mean standards are ideal. They were consensus standards agreed upon by a different committee for each group of commodities. There were Codex committees dealing with groups of commodities – such as fats and oils, processed fruits and vegetables, and fish and fish products – and others for broad subjects such as food labelling and methods of analysis and sampling.

1. FAO, *This is Codex Alimentarius*, 2d edn (Rome, 1995).

FAO has also undertaken to build national infrastructure in developing countries which lacked systems for food control. These states might then have had to adopt the same standards at the national level as Codex committees. In addition to updating food laws and regulations, FAO has advised on strategies for control of food quality, human resources development, and the establishment of facilities for the evaluation of food additives, pesticide residues and other food contaminants. FAO has also participated in consumer education and food handling at village and household levels. In this field also, an FAO activity benefited both developed and developing nations.

SOIL MAP OF THE WORLD

Another example of FAO providing standards was its work with UNESCO in the preparation of a *Soil Map of the World* lasting 17 years (1961-78).¹ The scale was 1:5 million. One reason for this task was the chaotic state of soil cartography. Countries had developed their own nomenclatures and systems of classification to such an extent that translation was impossible because similar terms meant different things; it provided a common terminology and nomenclature. The map was undertaken at the request of the International Society of Soil Sciences.

The map was composed from about 10,000 existing soil maps and reports in addition to information from FAO staff, national and international institutions and special missions. It comprised 18 colour sheets and a legend sheet was accompanied by ten explanatory volumes. It made possible a first appraisal of the world's soil resources. While the scale was too small for use in projects, it encouraged the preparation of more detailed maps at the national level. It was significant that China

1. FAO/UNESCO, *Soil Map of the World*, 10 vols (Paris, UNESCO, 1978)

provided information before becoming a member of FAO; it would only have cooperated with a multinational organization at this time.

Agro-ecological Zones Study

FAO went on to link the soil map with data on climate and the growth requirements of specific crops. Temperature and the growing periods of different agro-ecological zones were considered. The aim was to develop a first assessment of the production potential of the land resources of the developing world. Completed in 1981, the study indicated the extent of cultivable land and reserves, the potential of rain-fed arable land, and the areas and crops that would yield the highest return from increased inputs. The study showed that over 2000 million hectares of rain-fed land were potentially cultivable in developing countries while the area cultivated in 1981 was about 784 million hectares. In Africa the area suitable for maize was 424 million hectares but that for wheat was only 38 million hectares.¹ Although it was reassuring to know the land existed, the problem was that the potential land was not always where the people in need were.

Potential Population-supporting Capacity

FAO jointly with the International Institute for Applied Systems Analysis (Vienna) conducted research to determine the potential population that could be supported by land in the developing countries. It was funded by the UNFPA and included both rain-fed and irrigated production in the Third World, excluding East

1. *FAO: The First 40 Years 1945-1985*, p. 116.

Asia;¹ it was published in 1983. Livestock production was arrived at using 18 major crops including grassland. The potential for food production was determined at three levels of inputs corresponding to traditional, moderate and high levels of technology. It demonstrated how poorly population was matched with food-producing capacity and that increasing levels of inputs would be essential in all countries without large land reserves.

DESERTIFICATION MAPS

FAO in cooperation with UNESCO, the WMO and UNEP submitted a World Map of Desertification to the United Nations Conference on Desertification held in 1977. In 1979, the same agencies and the International Society of Soil Sciences initiated a desertification assessment and mapping project to provide more reliable data on the rate and risk of desertification. This would assist national and international plans to arrest the advance of deserts.²

FAO has been engaged in a wide range of activities to combat desertification. These include field projects for soil conservation, land-use planning, improved management of rangelands and forestry in arid areas. One of the most important undertakings has been the Ecological Management of Arid and Semi-Arid Rangelands, dealing with improved grazing of rangelands. Originating in Tunisia, this programme has spread to Africa, the Near East and Western Asia. The study found that 64 of the 117 countries had insufficient land resources to feed their populations in 2000 with traditional technology and that even with high levels of inputs, 19 would

1. FAO, *Review of the Regular Programme 1984-85* (Rome, 1985), p. 183.

2. FAO/UNEP/UNESCO, *A Provisional Methodology for Soil Degradation Assessment, Provisional Map of Present Degradation Rate and Present State of Soil* (Rome, FAO, 1979)

have insufficient food. The annual feed deficit of rangelands might be offset by supplementary feed, from fodder shrubs and tea plantations.

THE WORLD SOIL CHARTER

The limit of the world's soil resources was appreciated at the Hot Springs Conference in 1943, but action to cope with the problem has been limited even in developed countries. Possible solutions to the loss of soil were contained in the *World Soil Charter* adopted at the 1981 FAO Conference.¹ The Charter called for programmes of conservation and land reclamation. It recommended land-use policies be undertaken for long-term use of the soil rather than short-term policies such as reduction of fallow periods in Africa, where continued cultivation of rain-fed areas without applying conservation would lead to a loss of about one-quarter of the land's productivity.² Furthermore, the Charter called for training courses and public awareness campaigns to involve the local population in conservation. It presented policies with which countries could undertake control of soil degradation.

FAO has been executing projects in many developing countries. In the central highlands of Ethiopia it helped the government with a UNDP-supported project to slow erosion processes which could cause the loss of as many as 2000 million tonnes of soil a year. FAO helped to train soil conservationists and leaders of peasant associations. WFP supported conservation through its food-for-work projects in Ethiopia and elsewhere.

1. *World Soil Charter* (Rome, FAO, 1981).

2. *FAO: The First 40 Years 1945-85*, p. 97.

LAND AND WATER DEVELOPMENT

Some of the major achievements in the development of land and water resources in developing countries were the following:

- The Mahaweli Development project in Sri Lanka, the Naktong River Basin Development project in the Republic of Korea, the Merrim Lagoon project in Latin America, the Chad River Basin Development, Volta and Rifiji-Pangani Wami projects in Africa were examples.
- Intensive groundwater resource surveys and development in Cyprus, Egypt, Greece, Jamaica, Jordan and the Philippines.
- Promoting effective fertilizer use.
- Soil conservation and reclamation activities, e.g. in the Kalasin project in Thailand, and land reclamation projects in Egypt, Iran and Iraq.
-

FERTILIZERS

It has been proven that efficient use of fertilizer with traditional cropping practices on the farms can result in considerable increases in yields.¹ This was a reason for the success of the FAO Fertilizer Programme established in 1961 and by 1980 operational in 20 countries. An FFHC Fertilizer Programme based on cooperation between FAO and the fertilizer industry was initiated in 1961. From 1962-1967, the fertilizer industry was the main contributor of funds under FFHC, at an annual average level of about U.S. \$300,000. Since 1966-1967 with the initiation

1. Michael Mathieu, *FAO Fertilizer Programme: Its Chances of Success* (Rome, FAO, 1983)

of the FAO/Government Cooperative Programme, total donor contributions gradually increased to just under U.S. \$8 million per year in 1981.¹

In 1974, an International Fertilizer Supply Scheme was created in an effort to help alleviate the fertilizer shortage in some of the poorer countries. Total pledges in cash and in kind from 1974 to June 1981 amounted to \$128 million. The International Fertilizer Scheme was established to monitor the fertilizer supply and demand in developing countries and assist them in obtaining fertilizer.

A sudden rise in fertilizer prices in 1973-1974 during the world food crisis caused many developing countries to realize the need for economical use. The World Food Conference held in Rome in 1974 recommended that technical knowledge be provided to developing countries for extension workers to be trained to train farmers in efficient use of fertilizers and other inputs. In the 1960s, the Fertilizer Programme and to some extent activities through the International Rice Commission were the only operations directly concerned with agricultural issues at the farmers' immediate level. In the long term the use of mineral fertilizer was to be expanded as an extension package combined with other inputs such as organic recycling, improved seeds, pest control, irrigation, etc. The immediate objective was to create a demand for fertilizer from small farmers and to establish a national extension service for fertilizer, its distribution and marketing.

The increasing cost of fertilizer and fuel resulted in organic recycling to provide fertilizer and biogas production for small farmers. One regional project was responsible for this development in Burma, India, Indonesia, Republic of Korea,

1. FAO, *Review of the Regular Programme 1980-81* (Rome, 1981), p. 174.

Laos, Pakistan, the Philippines and Vietnam. Regional training courses for the project were held in China and India,¹ fairly advanced in this field.

National training activities were conducted in Bangladesh, Burma, Costa Rica, Dominican Republic, Indonesia, Kenya, Republic of Korea, Liberia and Sierra Leone. Information was exchanged between countries in Asia and the Pacific and created interest in other regions, resulting in workshops organized in Costa Rica, Sierra Leone and Togo. Biogas production and recycling of organic waste were undertaken by TCP projects in Afghanistan, Dominican Republic, Guinea, Haiti, Indonesia and Lao.

In Burma by 1981, 30,000 hectares had been fertilized with nitrogen fixed by azolla and blue-green algae as a result of an FAO training course held there in 1979. It was not known whether this method of fertilizing has been continued under the military regime.

Fertilizer consumption was increasing three times as fast in countries which were participating or had participated in the Fertilizer Programme than countries not involved in the programme. Furthermore, because of the rise in demand, domestic production of fertilizer began or increased in countries where the programme was operating or had operated, for example Brazil, Ethiopia, Indonesia, Morocco and Turkey. Such consequences could be traced back to the introduction of fertilizer by FAO projects in countries,² although of course some countries introduced fertilizer without FAO influence.

1. FAO, *Review of the Regular Programme 1980-81* (Rome, 1981), p. 178.

2. FAO, *Review of the Regular Programme 1980-81*, pp. 172-181.

During the year 1980-1981, the Fertilizer Programme participated in activities in 21 countries:

- laying out 3900 simple trials and 8300 multi-plot demonstrations for small farmers;
- organizing 14,350 field days attended by approximately 110,000 farmers;
- conducting about 200 training courses for 5000 participants on the use of fertilizer and other inputs; and
- managing 68 fertilizer distribution and credit schemes covering over 24,000 farmers.

This was, however, a minor operation when one considered how many farmers existed in poor countries.

In 1984, about 60 percent of 37 fertilizer projects involving small farmers were in Africa.¹ Developed countries also gained from FAO's work in fertilizer. The U.S.D.A. annual report, *World Fertilizer Situation*, relied heavily on FAO statistics and data for its projections on fertilizer production and consumption.² The same information was used to determine the pricing of fertilizer components.

PLANT PROTECTION PESTICIDES

Crops needed protection from weeds, insects, birds and diseases. Increasing crop production could alter the ecosystem so that there was increased damage by these elements. Fertilizer could nourish weeds as well as crops and if herbicides were not

1. FAO, *Review of Field Programmes 1984-85* (Rome, 1985), p. 18.

2. [U.S.] *Background Briefings on Individual International Organizations: Food and Agriculture Organization* [1983], p. 1.

applied with the fertilizer, there could be crop reduction rather than increase.¹

Herbicides accounted for more than half the use of pesticides in industrialized countries. Chemicals were also applied for protection against insect pests, diseases and rodents. In the decades 1965-1985, chemical pesticides were being used less as Integrated Pest Management (IPM) was the method commonly applied. IPM meant use of other techniques such as breeding of genetic resistance in the crop itself, introduction of enemies of the crop pests, and the use of 'trap crops' to direct pests from the main crop. In addition chemical pesticides might or might not be used. FAO has shown leadership in IPM, having organized a symposium on the subject as early as 1965. Other methods of plant protection involved plant breeding, mechanization for weeding, and the elimination of seed-borne virus diseases.

FAO was involved with plant protection from its earliest days, inheriting the International Plant Protection Convention of 1929 from the International Institute of Agriculture. In 1951, it was replaced by a new International Plant Protection Convention. Through this convention governments agreed to set up a world reporting service on plant diseases and pests for FAO's information. FAO also established national and regional organizations for plant protection. Plant protection depended mostly on national institutions though FAO has arranged help for emergencies. It built an international system to deal with diseases and pests which as in animal health knew no frontiers.

The safe and efficient use of pesticides had been kept under review by FAO in cooperation with WHO and an FAO Committee of Experts on Pesticides in

1. *FAO: The First 40 Years 1945-85*, p. 42.

Agriculture established in 1962. It was renamed the Committee of Experts on Pest Control and had four expert panels dealing with specialized aspects of the problem.

A computerized plant protection information system becoming operational in 1985 linked FAO Headquarters, Regional Offices and other plant protection organizations. The system Cooperative Action for Plant Health (CAPH) led to collaboration not only between these organizations but also donors. A global survey of the operation and major needs of regional plant organizations was completed in 1984. A special session of selected CAPH members was held in early 1985 to discuss specific plant protection problems in Africa – control of the large grain borer in Africa generally and of army-worms in Kenya in 1984 in particular.

FAO had been involved in 19 national and international biological control programmes.¹ One of these was control of the cassava mealbugs in 22 African countries undertaken in cooperation with the International Institute for Tropical Agriculture. There has also been considerable research on genetic resistance of different crops to disease and pests.

In 1985 an International Code of Conduct on the Distribution and Use of Pesticides was adopted by the FAO Conference. Acceptance was to remain voluntary as usual in UN fora. It had a series of technical guidelines on how to identify and avoid potential hazards in the distribution and use of pesticides. All involved from governments to manufacturers, traders, and users were encouraged to follow the recommendations. Specific procedures were given for the testing of pesticides and in the establishment of registration and control procedures. The Code was expected to benefit the many developing countries that did not have their own control schemes.

1. FAO, *Review of the Regular Programme 1984-85*, p. 49.

In addition, FAO has had a field programme which helped governments equip laboratories for introduction and use of pesticides. The importance of training could not be overestimated in poor countries where only 10 percent of available technical information reached the farmers.¹

At the first session in 1984 of the Panel of Experts on Improved Weed Management, two areas of importance were training and on-farm demonstration.² Nine national training courses were organized in 1984-85 and a temporary coordinator was appointed in East Africa for weed control training. An instruction manual on weed management was produced as well as handbooks on weed identification.

LOCUSTS AND BIRDS

Approximately 60 countries in Africa, the Middle East and South West Africa were threatened by locust plagues. FAO assistance to locust control dated back to 1951 when several countries requested help with the problem. An FAO Desert Locust Programme was formed to develop international cooperation and action to control the plague. Regular surveys and reporting services on an international basis were established by a U.S. \$15 million UNDP funded project executed by FAO in 1960-1970. To establish collective action, FAO helped to create two regional organizations, the Desert Locust Control Organization for Eastern Africa and the Organisation Commune de Lutte Antiacridienne et de Lutte Antiaviaire were established by 1971, both financed by the participating governments. There were three commissions which

1. *FAO: The First Forty Years 1945-85*, p. 43.

2. *FAO, Review of the Regular Programme 1984-85*, p. 19.

functioned under the aegis of FAO, each having its own secretariat. Their work is coordinated by the FAO Desert Locust Control Committee which was funded by an International Desert Locust Trust Fund. Technical assistance was also provided to the Organization Internationale du Criquet Migrateur Africain and to the International Red Locust Control Organization for Central and Southern Africa. The desert locust programme as these organizations were known is exclusively financed by the governments themselves. Because of its activities, there was no major outbreak from 1965 to 1985.

In Africa, a large programme for the control of quelea, a grain-eating bird, was implemented by FAO and funded by UNDP. The first project assisted ten countries in West Africa, while the second serviced five countries in East Africa. These projects cooperated with national projects for bird control. As a result of these efforts, about 5000 hectares of quelea roosts and nesting colonies were destroyed annually in East Africa. FAO undertook to reduce bird damage in Ethiopia, Somalia, Tanzania, Uganda and Kenya. Cooperation among the nations as to the migration of quelea and breeding grounds was crucial to national programmes. A sub-regional approach was more economical with regard to surveys and the testing of intervention methods such as common spraying campaigns. A central service to collect and analyze the information was necessary as well as communication between national bird control units. Countries required assistance to coordinate and exchange information, and FAO began a series of projects financed by UNDP in Ethiopia, Kenya, Somalia, the Sudan and Tanzania.

Their achievements included establishment of the exact nature of quelea migrations in East Africa. Because quelea did not make large-scale international migrations, local control was of greater importance, although border migrations made inter-country cooperation essential, as well as permitting collective spraying campaigns using the same aircraft. Exchange of experience and control methods were disseminated in all the countries of the sub-region. Dosage rates as low as 1-2 litres per hectare were shown to be more effective than higher rates, thereby saving foreign exchange previously spent on large quantities of pesticides. In the Sudan, it is estimated that a spraying campaign costing \$40,000 saved \$60 million in crops from bird damage.¹

Group and individual training, exchange visits and study tours were the main forms of technology transfer. Between 1980-1985 group training was held for 125 participants from the region. Annual technical meetings were held to exchange information on successful control. Regional aspects of the bird control programme were taken over by the Desert Locust Organization for East Africa. The activities seemed to have been adequate for the control of bird populations.

SEED IMPROVEMENT

The cheapest and one of the quickest ways of increasing crop production was to use good quality seed combined with appropriate amounts of fertilizer and water. As early as the late 1940s, experimental seeds were supplied under the UNRRA Transfer Fund. From 1959-1962 a World Seed Campaign was undertaken with 79 countries

1. FAO, *Review of the Regular Programme 1984-85*, p. 221.

involved. The Campaign culminated in World Seed Year in 1961 to promote the use and breeding of improved varieties.

In 1973, the Seed Improvement and Development Programme (SIDP) carried out by FAO was established to continue the earlier work. The Programme identified the best varieties for rain-fed and irrigated areas, especially material adapted to marginal lands and areas prone to drought; local varieties were also improved when possible.

The FAO Regular Programme Review 1978-79 observed that, in 1977, FAO had executed seed projects in 12 developing countries to produce more than 200,000 tonnes of good quality seed of selected crops sufficient for the planting of 2.5 million hectares and that over 19,000 samples were tested in the field for seed quality¹.

Between the start of field activities in 1975 and 1979, the Programme assisted 22 developing countries. In 1978, seven countries (Cameroon, Chad, Cuba, Ethiopia, Honduras, Mauritania and Nigeria) were associated in the formulation of national seed programmes and 11 governments in specific projects (China, El Salvador, Ethiopia, Gabon, Lao, Mali, Mauritania, Nepal, Niger, Paraguay and Vietnam). In addition, SIDP in 1978 provided more than 50,000 seed samples to 119 developing countries.

Up to December 1978, approximately 700 national staff had been trained with 90 percent trained at the intermediate and lower levels. Higher-level training had also been undertaken. As a result of training by SIDP, several national programmes had been developed with a minimum of expatriate assistance. Seven publications for

1. FAO, *Review of the Regular Programme 1978-79* (Rome, 1979), pp. 109-118.

technical guidelines and training were issued in the three official languages of FAO, English, French, and Spanish, and one in Arabic and Chinese.

In addition to cereal seed, many institutions in the Third World required grain legumes and vegetable seed for testing and large-scale production and special equipment in seed processing, testing and storage. The bulk of assistance went to the least developed and most seriously affected countries. With the gradual improvement of cereal seed availability in many developing countries, from 1977-79, FAO emphasis shifted to vegetables and pasture crops.

The total amount committed under Trust Funds by 1979 had reached \$8.8 million, considerably less however than the \$20 million recommended by the World Food Conference in 1974. One-third of the amount was for training organized by Headquarters and two-thirds for field projects in seven developing countries (Bhutan, Gambia, Mali, Nepal, Somalia, the Sudan, and Swaziland). Up to February 1979 TCP financed 20 seed projects in 18 developing countries with \$2.4 million and assisted in seed shipments to 14 developing countries worth \$1.3 million. By the end of 1984, over 400 projects had been implemented costing over \$160 million, and 2500 people had been trained while about 650,000 seed samples for experimental purposes had been sent to 140 countries.¹

PLANT GENETIC RESOURCES

The importance of plant genetic resources was recognized early in the twentieth century. Work on these resources was begun in the late 1940s following a recommendation by the First Session of the Standing Advisory Committee on

1. FAO: *The First Forty Years 1945-85*, p. 39.

Agriculture in 1946. Genetic stocks of wheat and rice were catalogued, tested and conserved for use around the world. The UN Conference on the Human Environment in 1972 resulted in the establishment in 1974 of an IBPGR with financing through CGIAR. Its secretariat was located in the FAO Plant Production and Protection Division in Rome. The plants of the past might carry important characteristics such as resistance to pests or diseases, which could be bred into future varieties. Much of the world's genetic heritage was in danger of being lost, especially in developing countries where plant breeding programmes were limited to increasing food production.

The basic functions of the IBPGR are to support and promote the conservation of plant genetic resources as well as their evaluation and use. The IBPGR did not itself house collections of germ plasma, but cooperated with national and international centres which did. In 1977, the IBPGR took over responsibility of the Southwest Asia Programme including Iran, Iraq, Afghanistan, Pakistan, Syria, and Turkey. The Mediterranean Programme has been supported by the IBPGR almost since its inception. It developed with the cooperation of national institutes in Algeria, Cyprus, Egypt, Greece, Italy, Libya, Portugal, Spain and Yugoslavia. The IBPGR implemented a regional programme, the Southeast Asia Programme, in cooperation with the Governments of Indonesia, Malaysia, Papua New Guinea, Philippines and Thailand. Rice remained the responsibility of IRRI.

Later programmes included East Africa (Ethiopia Gene Bank), Central America and the Caribbean (Turrialba Centre), Europe, West Africa, the Andean Zone and other parts of South America. Although the work of the IBPGR varied considerably

in countries, the most important has been training of local personnel in genetic resources.¹

During the first decade, the IBPGR supported about 300 collecting missions in 70 countries.² By 1984, the base collections of most of the world's principal crops were being held in long-term storage by centres in 24 countries. New national programmes had been started with IBPGR financial support in about 50 countries, but the developing countries lacked trained scientists to fully exploit available germ-plasma.

In 1983 the FAO Conference adopted an International Undertaking on Plant Genetic Resources. Those who voluntarily adhered to the undertaking agreed to collect and preserve plants in danger of extinction or essential to development. Again, the undertaking should be binding to attain preservation of all necessary plants. These governments and institutions made the genetic resources available to scientists for plant breeding, scientific research, or genetic conservation. FAO assisted developing countries to exploit their resources for food production. There would thus be an International Gene Bank, an internationally-coordinated network of national, regional and international centres under the aegis of FAO. In 1983, a Commission on Plant Genetic Resources was created to monitor the undertaking. Some developing countries, mostly in Latin America, believed the Board working with the CGIAR gave too much control of plant genetic material to laboratories in developed countries and to transnational corporations,³ which the Commission took steps to rectify also.

1. FAO, *Review of the Regular Programme 1978-79* (Rome, 1979), pp. 122-125.

2. FAO: *The First Forty Years 1945-85*, p. 100.

3. Douglas Williams, *The Specialized Agencies and the United Nations: the System in Crisis* (New York, St. Martin's Press, 1987), p. 33.

With regard to forests, seeds were stored on a short-term basis in the country where collected and distributed to other areas upon request from FAO. These efforts were monitored by the FAO Panel of Experts on Forest Gene Resources established in 1968.

Once again industrialized and developing countries gained by international cooperation under FAO auspices. Plant genetic conservation was in the interest of all nations. In spite of all the progress, loss of genetic material still occurred and was often irreversible.

ANIMAL PRODUCTION

While large-scale production units were being established especially near urban centres, most livestock products were produced by small livestock farmers in rural areas. There was considerable scope for increasing the productivity of these small farmers with improved production techniques and markets. The techniques applied in the industrial countries were beginning to be introduced in poor countries. But most livestock production was based on traditional systems with only gradual increases in output. However, the demand for livestock products rose more rapidly with increased income than food production rose. In fact between 1974-76 and 1983, crop production in the developing countries increased by 28 percent while livestock production increased by 40 percent.¹ In those countries, only in pig and poultry production had modern techniques been applied with imported rather than local feed.

At the beginning, FAO placed emphasis on the collection and publication of information on cattle breeds in different parts of the world, for example, India and

1. *FAO: The First Forty Years 1945-85*, p. 50.

Pakistan, Africa and Europe and sheep breeds in the Mediterranean. This work continued with publications on water buffaloes in the 1980s.

Emphasis shifted to advising governments on how to use their animal genetic resources supported by SIDA and other trust funds. FAO has promoted breed substitution and planned cross-breeding in many developing countries. The Artificial Insemination and Breeding Development Programme provided training and technical support. Furthermore FAO operated a Semen Donation Scheme. In the mid-1970s, FAO and UNEP began to collaborate in surveying the world's animal genetic resources with special emphasis on endangered species. Their germ-plasm was stored in gene banks. The survey of trypanotolerant livestock in Africa is discussed in the chapter on animal health.

The development of small animals, especially sheep, goats, poultry and pigs, had always been assisted by FAO through field projects for individual species.¹ Rabbits and ducks received less attention from governments and FAO. In 1985 an expert consultation on sheep and goat production to review experience in production techniques in both developed and developing countries was held. Several publications were produced. The type of assistance given by FAO was illustrated by improving the productivity of traditional mutton production in humid areas in West and Central Africa. Goat meat produced in Fiji substituted for imported meat. Seminar and training activities on feed and nutrition aspects were held in cooperation with the Animal Production Health Commission for Asia, the Far East and Southwest Pacific. In Latin America, there were five regional and subregional consultations and workshops between 1982 and 1985 in addition to national training. The European

1. FAO, *Review of the Regular Programme 1984-85*, p. 103.

regional programme for the European Cooperative Research Network on Sheep and Goat Production has stimulated cooperation in applied research among 63 national institutes in 21 countries; from its establishment in 1979 until 1985, six workshops had been held.¹

FAO has taken the lead in assessing draught animal power especially in Africa and Asia where it is of priority concern. To formulate a programme of action an expert consultation, 'Appropriate Use of Animal Energy in Agriculture in Africa and Asia', was held in 1982. The consultation recommended the establishment of a TCDC network of research and training on draught animal power under FAO sponsorship. In 1983 and 1984, a series of missions visited nine countries in Africa and five in Asia to prepare for the cooperation of three such networks in the next biennium.

Originally, feeding of livestock was concentrated on extensive production systems on rangelands and pastures. In the late 1970s and early 1980s, increasing emphasis was placed on non-conventional sources of animal feed such as straw, sugarcane residues and other byproducts of local crops. With simple treatment these can be turned into animal feed and hence lead to local self-sufficiency. FAO has also worked out the carrying capacity of natural pastures so as to avoid overgrazing. To cope with drought, the organization has provided policies to secure livestock feed. In the early 1970s, FAO, with institutes in France, Germany, and the U.S., helped to establish an international nomenclature for feed and a system for presenting feed data.²

Dairy cattle also received special attention from the Organization. In the late 1940s, UNICEF established the Milk Conservation Programme for which FAO

1. FAO, *Review of the Regular Programme 1984-85*, p. 104.

2. Phillips, *FAO: Its Origins, Formation, and Evolution, 1945-1981*, p. 105.

provided technical assistance in milk production and plant management.¹ FAO collaboration led to the creating of 70 milk plants in different countries and training of personnel for the dairy industry. By the end of the 1960s, the Dairy Branch of FAO was providing technical backstopping to many field experts and supervising a programme for dairy training at all levels. The programme financed by the Danish International Development Agency had expanded to nearly all developing countries.

An International Scheme for the Coordination of Dairy Development was established by the FAO Conference in 1969. Extra-budgetary funds were donated by Finland. By the end of 1980, 49 countries had received assistance of different types.

An International Meat Development Scheme similar to the dairy development scheme was established in 1974 and financed by the Swedish International Development Agency. By the end of 1980, assistance had been given to 30 countries, in 25 of them in association with the dairy development scheme.

CONCLUSION

FAO cooperated with other organizations in the UN system where the mandates overlapped or with funding organizations, and had limited activities with NGOs.

Director-General Sen contributed to the population debate by pointing out to the Vatican and the world that though there were adequate resources for food production, they were often not in the places where hunger persisted. In many cases a lack of resources or their exploitation still in the realm of research was the reason for

1. Phillips, *FAO: Its Origins, Formation, and Evolution, 1945-1981*, p. 106.

poverty. The Vatican argued modern transport made a fair distribution of food possible.

FAO did not conduct research but it cooperated with various international research organizations and supported national research. In trade, it has made commodity projections, preparing the necessary commodity reports and bulletins for intergovernmental cooperation. Newly-independent countries nearly all sought marketing advice from FAO and benefited from PFL projects such as improving farm and village storage structures, providing small-scale driers and training at all levels.

Important standardization accomplished by FAO includes the FAO Codex Alimentarius on standards for food manufacturing, safety and quality worldwide (jointly collaborated with WHO) which fostered world trade and a Soil Map of the World which provided a common terminology and nomenclature for soil. To halt soil loss, FAO adopted a World Soil Charter in 1981.

Fertilizer can increase traditional cropping considerably, but it might also increase weeds and pests. Crops needed protection from weeds, insects, locusts, birds and diseases. Integrated pest management with only some or no reliance on pesticides was FAO's practice; one of the most rapid ways of improving crop production was to use good quality seed combined with water and fertilizer. FAO has also been active in plant genetic resources and animal genetic resources as well as other aspects of animal production. In all these areas, FAO has made a contribution throughout the developing world.

CHAPTER 7

FAO AND ANIMAL HEALTH: CASE STUDY 1

The principal primary sources relied on in the following pages were:

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22. *World Animal Review*, no. 51, July-September, 1984.

23. *Report of the Twenty-Fourth Session of the European Commission for the Control of Foot-and-Mouth Disease held in Rome, 7-10 April 1981*, FAO, Rome, 1981.
24. *FAO in 1981*, FAO, Rome, 1982.
25. FAO/WHO/OIE, *Animal Health Yearbook*, 1983, FAO, Rome, 1984.

INTRODUCTION

The prevention and reduction of animal diseases continued to be the most immediate means of increasing world food supplies, especially of proteins in developing countries. It was estimated that at least 5 percent of cattle, 10 percent of sheep and goats and 15 percent of pigs died annually due to disease.¹ Rinderpest still reduced the world's food supply more than any other animal disease, especially in Africa. In addition, there were production losses from wasting diseases such as parasitoses and chronic bacterial infections and less patent losses in the form of missed opportunities to export and the need to import meat. Cattle served as draught animals for threshing, hauling and other rural work and provided manure for increasing crop production and use for household fuel. Serious diseases could also cancel out all efforts at better feeding and breeding. When disease epizootics (prevalence among animals) occur, the rural economy could be seriously disrupted. In parts of Africa, cattle were a traditional form of wealth regarded as a savings deposit rather than being reared for sale. Animals also often had social and religious significance for the farmers whose livelihoods they helped to provide. Furthermore, diseases such as anthrax, brucellosis, tuberculosis, rabies and Rift Valley fever might be transmitted to man (zoonoses) especially under tropical conditions in developing countries.

1. *The State of Food and Agriculture, 1982*, FAO Agriculture Series, No. 15, (Rome, FAO, 1983), p. 125.

Although the health of his animals was the responsibility of the individual farmer, many diseases spread within countries and between countries. Essential to disease control, therefore, were national veterinary services, their disease control programmes and interstate cooperation such as coordination of vaccination campaigns.

Increased trade and transportation have increased the risk of spreading disease and made animal quarantine a necessity. Most of the serious epizootics that have occurred in recent years have resulted from inadequate animal health control over regional and inter-regional livestock trade and movements. The weak points in national veterinary services included veterinary manpower shortages, deficient veterinary infrastructures and legislation, inadequate animal health programmes, budgetary provisions and inadequate transport and information services. Rising costs of fuel and other supplies such as drugs and equipment have further reduced the effectiveness of veterinary services. By training people and by advising and helping with planning, FAO was to some degree in a position to change this situation. Even if information was provided to these countries, it was almost never properly distributed. Yet, in spite of all these difficulties, significant control of contagious diseases has been accomplished on all continents with international assistance, including that of FAO, even when veterinary services were less developed than they were today. The industrialized countries were free of most of the major epizootic diseases. There were cases of total eradication even in developing countries and regions, such as the eradication of foot-and-mouth disease in Central America while outbreaks still occurred in Europe and the rest of Latin America.¹ African swine fever has been

1. *The State of Food and Agriculture, 1982*, p.123.

eradicated from Cuba, the Dominican Republic and Malta, as discussed in the section on emergency disease control.

Most governments have been concerned with eradicating major infectious diseases such as bovine brucellosis, tuberculosis, glanders, foot-and-mouth disease, rinderpest, classical swine fever, sheep pox, Newcastle disease, rabies, East Coast fever, babesiosis and its major vector tick *boophilus microplus*. FAO has been providing assistance to governments upon request. The three diseases that posed the greatest problems were rinderpest, foot-and-mouth disease and African animal trypanosomiasis. The first two have been the focus of major international campaigns and are considered at length in later sections, while trypanosomiasis has been receiving attention. Chronic diseases such as mastitis in dairy cattle and respiratory diseases in poultry have resulted in heavy economic losses. These diseases have not received adequate attention from governments and therefore FAO because it tended to respond to government requests.

GENERAL ANIMAL HEALTH ACTIVITIES

FAO's Animal Health Service has been in operation, along with its programme in animal production, since 1946. In 1959, the Animal Production Branch, the Dairy Branch and the Animal Health Branch were consolidated to form the Animal Production and Health Division. The work in nutrition and animal genetic resources has also contributed to the general health of livestock. The long-term objectives of FAO in this field were to increase the supplies of proteins of high biological value in

order to raise the nutritional levels of people generally and to raise standards of living in rural communities.¹

FAO has helped governments by providing: technical expertise; fellowships, seminars and other forms of training; advisory visits to countries and regions from FAO headquarters; the convening of meetings, by providing specialized laboratory and field equipment; and the provision of vaccine especially in emergencies. FAO was not normally a supply agency but equipment and vaccines were often supplied to enable experts to get on with the job quickly and efficaciously. FAO disseminated information regarding the latest techniques and trained people to use them, including field personnel. It helped countries to maintain up-to-date laboratories and strengthened their veterinary services in other ways. The functions of a national veterinary service were specified in the FAO publication *Standards of Veterinary Services* published in 1974.

Although most of FAO's work in animal health occurs in individual countries, a considerable dimension was also international, involving coordination and the setting of standards for vaccine production and diagnostic tests as well as international reporting of major infectious diseases. Outbreaks of major epizootic diseases required coordinated control measures on a regional and inter-regional basis.

Intergovernmental organizations were the most appropriate bodies to manage the international problems posed by these kinds of diseases, which recognised no borders. Control in one country must be simultaneously exercised in neighbouring and other regional countries if a disease was to be contained.

1. *Report of the Food and Agriculture Organization of the United Nations to the Economic and Social Council at its Forty-Fifty Session*, (Rome, FAO, 1968), p.16-17.

FAO provides a mechanism through which all international and national activities in animal health can be coordinated. It cooperated closely with a number of other international organizations such as the International Office of Epizootics (OIE), the European Association of Animal Production, the International Dairy Federation, the International Regional Organization Against Plant and Animal Diseases and the World Veterinary Association.

The OIE and FAO cooperated through an agreement signed in 1953 in collecting and disseminating information on the occurrence of transmissible animal diseases and coordination of their control. The OIE, however, did not intervene in the field. In collaboration with the WHO, they published the *FAO/WHO/OIE Animal Health Yearbook* discussed in the section on Information Sources. FAO and OIE issued their first tabulation of the incidence of 100 animal diseases from over 80 countries in 1957.

Regional banks and funding agencies such as the UNEP and the UNDP financed FAO field activities and studies in animal health. FAO also established links with regional bodies such as the OAU, the EEC (later EC) and the Pan American Health Organization. For example, in 1971, FAO, OAU, and OIE organized a 'Joint Consultation Meeting on Conditions for the Establishment and Maintenance of Disease Free Zones' to facilitate international trade, primarily by the reduction of the incidence of rinderpest and foot-and-mouth disease.

International agencies concerned with animal health met periodically to review their objectives and to help devise strategies for implementation by countries, especially during campaigns. Frequently, national campaigns form part of regional, or

subregional, programmes.¹ The international campaigns against African swine fever, rinderpest, foot-and-mouth disease and African animal trypanosomiasis are discussed. Other diseases, such as East Coast fever and Newcastle disease in poultry, have also been subjects of national campaigns.

In the 1980s, FAO was particularly concerned with Africa and has devised 'Strategies for animal health in Africa'. In 1985 the number of livestock in Africa was about the same as in 1900 partly because of the incidence of diseases. Furthermore, to reach the average number of livestock units per veterinarian in developed countries, Africa required 20 times more veterinarians in 1985.

To a lesser degree than in fisheries, FAO conducted some of its work in animal health through regional commissions and regional projects. The four regional commissions for animal production and health were established as statutory bodies of FAO as follows:

Animal Production and Health Commission in the Near East: 1967 – included in Agriculture Commission since 1984.

Commission on African Animal Trypanosomiasis: 1979.

European Commission for the Control of Foot-and-Mouth Disease: 1953.

Regional Animal Production and Health Commission for Asia, the Far-East and South-west Pacific: 1973.

The existence of these commissions again facilitated regional cooperation and inter-regional cooperation, where it may not otherwise have been possible even when there were no interstate conflicts. That some developing countries were able to organize such cooperation themselves, was evidenced by the South American

1. FAO, *Animal Health: National and International Strategies of Action*, Committee on Agriculture, Seventh Session 21-30 March 1983, Rome, COAG/83/9, P.6.

Commission on Foot-and-Mouth Disease. The regional commissions provided the machinery for technical cooperation among regional countries such as regional exchange of information and experience. They provided a forum for coordinating national policies, plans and programmes of the region. They also channelled international assistance and helped coordinate research. The commissions on foot-and-mouth disease and on animal trypanosomiasis are discussed below in this chapter, specifically in the sections on those diseases. They were organized primarily to provide guidance and coordination for campaigns. The other two commissions supported animal production and health activities in their regions in general.¹

AFRICAN ANIMAL TRYPANOSOMIASIS

Almost one third of the African continent, some 10 million km² is affected by trypanosomiasis, which is pathogenic for mammals including man. Trypanosomiasis is the name given to several serious diseases caused by parasites transmitted by the tsetse fly. Thirty-seven African countries were affected by trypanosomiasis. Human trypanosomiasis was known as sleeping sickness. If all tsetse flies in Africa could be exterminated, sleeping sickness could be eradicated. African animal trypanosomiasis has resulted in a chronic shortage of milk and meat (often requiring meat to be imported) as well as a shortage of draught animals and caused seasonal migration of herdsmen and their families. Although forest covered some 3 million km² of this area, the remainder was virgin land, suitable for agriculture and livestock. It was estimated

1. FAO: *Directory of FAO Statutory Bodies and Panels of Experts as of June 1982*, pp. 19-20.

that the area could support 120 million cattle instead of the present 20 million, if it were freed of the tsetse fly.¹

Considerable external assistance was needed if the tsetse was to be controlled and the areas developed. In Nigeria, the tsetse has been eradicated from about 210,000 km² from 1956 to 1978 through selective spraying and insecticides.² Various other methods of control, which have been effectively applied, include the use of trypanocidal drugs and selective removal of vegetations that comprised the tsetse habitat. Further research was also being done on the potential introduction of trypan-tolerant livestock, which can survive in moderately tsetse-infected areas, the release of sterilized insects and the immunization of livestock. A combination of these methods was probably necessary in any campaign carried out on a continental scale.³

FAO has taken an interest in the problem for some time. The 1965 FAO Conference had recommended that increased attention be given to tsetse fly control in Africa, in view of the potential for increased land development.⁴ However, it was not until 1975 that a major programme was developed. With the food crisis in 1973-1974, it became apparent that the only large areas of uncultivated land to be put to the plough lay in the Sudan and in tsetse-infected areas of Africa. Hence, the World Food Conference called upon FAO to launch a long-term programme for the control of this disease. In accordance with this recommendation, FAO initiated the Programme for the Control of African Trypanosomiasis and Related Development. The prime focus

1. *FAO in 1975*, (Rome, FAO, 1976), p.15.

2. *The State of Food and Agriculture, 1982*, p.124.

3. *Training Manual for Tsetse Control Personnel* (Rome, FAO), p. 2.

4. *Report of the Conference of FAO, Thirteenth Session, Rome, 20, November – 9 December 1965*, (Rome, FAO, 1966), p. 54.

of the Programme was not limited to the control of the disease or its vector but also embodied plans toward the implementation of sound land use programmes and general rural development. This involved evaluation of agricultural and livestock potential and plans not only for land use but also community development to warrant the costs of disease control measures.

Again, FAO's role was primarily coordination of the activities of African governments, donor and research institutes, in cooperation with the WHO, OAU and other organizations.¹ FAO was the supranational agency in a position to coordinate all the activities of these governments and other institutions at regional and other international levels, but by 1985 not all 37 infected countries were effectively cooperating.

In a 5-year preparatory phase from 1975 to 1979, the Programme laid the foundation for the operational phase with emphasis placed on the planning and implementation of action-oriented projects both at national and international levels. The initial phase of the Programme emphasised training, applied research, pilot control projects, rearing of trypanotolerant cattle, mobilization of resources, services and the necessary management infrastructure.² FAO's function was primarily the provision of technical support for these activities and coordination of financial and technical resources of donors.³

Particular emphasis was given to training at all levels in order to strengthen national institutions in affected African countries. These governments cooperated

1. *The African Animal Trypanosomiasis: Selected Articles from the World Animal Review*, FAO Animal Production and Health Paper 37, (Rome, FAO, 1983), preface.

2. *Strategies for Animal Health in Africa: Twelfth FAO Regional Conference for Africa, Algiers, Algeria, 22nd September-2nd October, 1982* ARC/8218, p.5

3. *African Trypanosomiasis: FAO Fact Sheet*, (Rome 1981), p.4

with FAO, the WHO, the OAU and institutes such as the International Laboratory for Research on Animal Diseases (ILRAD), the International Centre for Insect Physiology and Ecology (ICIPE), the Organization de Coordination et de Coopération pour la Lutte Contre les Grandes Endémies and l'Institut d'Élevage et de Médecine Vétérinaire des Pays Tropicaux.

These training courses have been supported financially by both multilateral and bilateral donors. France, the Federal Republic of Germany and the United Kingdom have all three supported training courses at the postgraduate level.¹ FAO, the OAU and the WHO have organized several training seminars on trypanosomiasis and tsetse control. It was the close cooperation of all these institutions that has resulted in greater achievements rather than any single-handed efforts.

The first of a series of training courses was arranged by FAO, the WHO, the OAU at ILRAD for 67 African university graduates from relevant disciplines. With token assistance from FAO, West German and French bilateral agencies set up a centre for tsetse control personnel in Upper Volta for French-speaking countries. During the first course, 20 officers from 13 African countries were trained. This facility was, however, subsequently closed for lack of donor support.

A UNDP-supported Regional Project for Training and Applied Research in tsetse control has been conducted annually for English-speaking middle level control personnel in Zambia. In 1982, the course was partially supported by FAO's TCP programme. Since funding for the project has, at times, been inadequate, it has been

1. *Programme for the Control of African Animal Trypanosomiasis and Related Development, FAO Conference, Twentieth Session, Rome, 10-29 November, 1979, C79/29, p. 4.*

recommended that FAO attempt to secure trust funds to ensure training courses on a continuing basis.¹

By 1983, more than 350 people had been trained at various levels. Unfortunately, effective use of training was not always made since, after the trainers returned home, they may not have had adequate facilities or may simply have left the field for a better career elsewhere.² It was the high-level professionals who tended to move rather than trainees from the middle-level control services. As a result, in spite of the costly efforts to train personnel, only a relatively few senior specialists were active in tsetse and trypanosomiasis control. High-level training was aimed at government-nominated graduates of veterinary, medical and entomological disciplines. Government-nominated candidates were not on record as necessarily being the most qualified people for training in this field, while some countries repeatedly nominated the same candidates, despite the courses being costly and in great demand.³

Training has also been conducted mostly in the form of seminars and short, intensive courses for leaders. More training at the field level in control was necessary. To supplement them, FAO compiled a comprehensive training manual on the practical aspects of control, published in both English and French; also published was a field guide for diagnosis, treatment and prevention of trypanosomiasis.

To provide policy guidance for the programme, the FAO Conference in 1979 established a Commission on African Animal Trypanosomiasis to review and advise

1. *Report of the Commission on African Animal Trypanosomiasis*, Banjul, Gambia, 30 March -2 April, 1982: (Rome, FAO [1982]) p. 6.

2. *Programme for the Control of African Animal Trypanosomiasis and Related Development: 1982 Review*, p. 6.

3. *Report of the Commission on African Animal Trypanosomiasis*, Banjul, Gambia, p. 5.

on the national and international programme.¹ It was open to all member nations and associate member nations of FAO. Thirty-one African and 7 European countries participated at its first session held at FAO headquarters in April 1980. Shortages of trained staff and money were held to be two of the greatest obstacles to progress in control.² Emphasis was placed on research, on new drugs, on tsetse control, on immunization procedures and the production of trypanotolerant livestock. It was this overview of problems and clarification of priorities that international meetings provided. The recommendations were, however, mostly of a general nature and served primarily as guidelines for countries and international organizations.

A second session of the Commission on African Animal Trypanosomiasis was held in Banjul, the Gambia, in April 1982. In addition, a development advisory panel and an ecological/technical advisory panel were established to execute the Programme. The Development Advisory Panel met in Lome, Togo in December, 1980 and the Ecological/Technical Advisory Panel in Rome in June 1981. Joint sessions of these panels have also been held, such as the group of expert consultation in Rome on the impact of tsetse control on the environment in 1980 and a consultation on the economics of trypanosomiasis control in 1977 after field surveys in Botswana, Nigeria, Ivory Coast and Upper Volta and 12 other African countries in the framework of a UNDP/FAO project.

In order to implement the Programme, FAO collaborated with the WHO, the OAU, UNDP, UNEP and the governments of France, Belgium, the Netherlands, the Federal Republic of Germany, Italy, the United Kingdom and the United States as

1. *Report of the Conference of FAO, Twentieth Session, Rome, 10-29 November 1979* (Rome, FAO, 1980), p. 61.

2. *African Trypanosomiasis: FAO Fact Sheet*, p. 5

well as African governments. For FAO, it was often more a matter of cooperation rather than coordination.¹

From 1975 to 1982, 20 field projects were completed, supported by almost \$20 million.² The main part of these funds was supplied by UNDP, with 30 percent contributed by bilateral assistance agencies and 5 percent by TCP. Technical assistance, feasibility studies and project formulation missions have been carried out in 29 countries. Research conducted by field projects in Benin, Ivory Coast, Guinea, Senegal, Zambia and Mozambique contributed to methods of control that were cheaper and less damaging to the environment, for insecticides spread to kill the tsetse fly tended to damage birds, animals and organisms in the soil where they could remain as residues for up to 15 years.

Field projects in Mozambique, Zambia and the Ivory Coast in addition to training 110 middle-level control personnel to strengthen national veterinary services have resulted in achievements such as improved aerial insecticide application, updated knowledge of tsetse distribution, disease incidence and improved knowledge of the interrelationship between the tsetse vector and risks of infection to cattle and calves.

Further information has been accumulated from the 19 research projects conducted in 11 research institutions. The main objectives of research undertaken have been to revise existing tsetse and trypanosomiasis control techniques or to develop new ones with a view to obtaining better cost/benefit ratios and to reduce

1. *Programme for the Control of African Animal Trypanosomiasis and Related Development*, FAO Conference, Twentieth Session, Rome, 19-29 November, 1979, p. 4.

2. *Programme for the Control of African Animal Trypanosomiasis and Related Development: 1982 Review*, p. 4.

negative impacts on the environment.¹ Reports of the technical consultations to various countries have helped to determine the objectives of both basic and applied research. Coordinating research was again the role of FAO as, for example, in the coordination of the activities of the trypanotolerant research centres that existed in Africa.²

In addition to coordination and monitoring of the Programme, FAO fielded multi-disciplinary preparatory assistance missions to assist countries in preparing national programmes. In this it provided a broad base of expertise to countries from tsetse control to land use, range management and other agricultural activities. It was sometimes in a position to provide better expertise than bilateral agencies since it could recruit experts from all countries if it actually endeavoured to do so and was able to secure the time of the best experts. In 1978, advisory missions visited 14 African countries to assist in preparing control programmes.³

In 1980, reports prepared by missions to nine West African countries resulted in an inter-country programme jointly sponsored by FAO and local agencies.⁴ FAO was once again in a position to arrange regional cooperation between states despite political conflict; for complete disease control, all infested and neighbouring states must participate. A sub-regional mission has also been recommended for the River Niger Valley and a project has been formulated for the Kagera Basin Development Programme.

1. *Report of the Commission on African Animal Trypanosomiasis*, Banjul, Gambia, p. 6.

2. *Report of the Commission on African Animal Trypanosomiasis*, Banjul, Gambia, p. 1.

3. *FAO in 1978* (Rome, FAO, 1979), p. 29.

4. *FAO, in 1980*, (Rome, FAO, 1981), p. 29.

Sub-regional development support units have been set up in both West and East Africa. The first operated in Ouagadougou from 1985, funded by Italy under the FAO/Government Cooperative Programme.¹

Missions to the Gambia and Sierra Leone have investigated the possibility of multiplication of trypanotolerant herds. In many West African countries, livestock has developed tolerance to trypanosomiasis, through natural selection. A survey of trypanotolerant livestock was conducted jointly with UNEP and the International Livestock Centre for Africa (ILCA). The ILCA has also studied their productivity. The survey was followed by a workshop on the breeding of trypanotolerant cattle convened in Togo in 1980. Projects to improve trypanotolerant livestock were implemented in Benin, Guinea, Sierra Leone and Congo. A coordinated programme for research on trypanotolerant cattle was undertaken by FAO, the ILCA and the International Laboratory for Research on Animal Diseases (ILRAD); the latter has also undertaken research on the production of a vaccine to immunize domestic animals.²

Applied research has also been undertaken to develop more economical methods of tsetse control techniques with reduced effects on the environment. A group of experts met to consider the impact of tsetse control on the environment in Rome in June 1980.³

One of the important products of all these activities has been increased information, which FAO had in part disseminated to governments. Even when

1. *Programme for the Control of African Animal Trypanosomiasis and Related Development: 1982 Review*, p. 5.

2. *FAO, Animal Health National and International Strategies of Action*, p. 9.

3. *Strategies for Animal Health in Africa*, p. 6.

country reports were confidential and could not be released, FAO and other organizations such as the UNDP, the OIE and bilateral agencies were in possession of the information and could use it to help countries and research organizations. Two publications on African animal trypanosomiasis have been produced, one of them compiling articles on the subject, which had been published in *World Animal Review*. Various technical papers on such subjects as insecticides, application equipment and trypanotolerant animals have been widely distributed. Posters have been prepared to assist in a public awareness campaign. Two volumes have been published on trypanotolerant livestock in West and Central Africa.

An international tsetse information and news service began publication in 1978, *The Tsetse and Trypanosomiasis Information Quarterly* (TTIQ) is jointly sponsored by the Tropical Development and Research Institute (formerly the Centre for Overseas Pests Research) in Great Britain, FAO, the WHO, the OAU and the Institut d'Élevage et de Médecine Vétérinaires des Pays Tropicaux. It was prepared for publication in English and French by the Tropical Development and Research Institute. The quarterly, however, provided only abstracts and took no responsibility for their accuracy. While this service was adequate for technical purposes, FAO was asked to prepare other documentation for decision-makers.¹

To what extent this information actually reached the right people and was utilized by them was questionable. Although enough knowledge has been accumulated to undertake successful long-term control projects, there was still a great need for more

1. *Report of the Commission on African Animal Trypanosomiasis, Banjul, Gambia*, p. 2.

research and, as mentioned, for more practical information for decision-makers regarding implementation.¹

FAO had, as discussed, helped with the acquisition and dissemination of information and training. It could, however, only make a very limited contribution to tsetse control and rural development of these large areas of land. The onus was on African governments, which had many other priorities. Even when attention was focused on health, it was frequently human health or other animal diseases that were emphasized. Some diseases such as rinderpest might be easier to control with more quantifiable results in the short term.

African countries, however, felt that the single major constraint to an effective control programme was lack of adequate financial resources.² In this regard, external financing must therefore be sought and this must be done by countries themselves. FAO could assist countries in approaching agencies.³ Its prime function remained coordination and monitoring.

The United States government judged FAO to be the appropriate body to execute the coordinating role of the Programme for Animal Trypanosomiasis in Africa, citing its expertise on Africa and the Accra Office.⁴

RINDERPEST

Rinderpest, also known as cattle plague, was a contagious viral disease of animals such as cattle and buffaloes. Control and eradication of rinderpest for which there was

1. Ron Jones, 'Tempting the Tsetse with Smells', *Development and Cooperation*, no. 2, 1983, p. 22.

2. Evans Offori, 'Fighting Tsetse Diseases in Africa', *IAEA Bulletin*, vol. 1, 26, no. 3, September 1984, p. 43.

3. *Report of the Commission on African Animal Trypanosomiasis*, Banjul, Gambia, p. 7.

4. U.S.D.A., *FAO as it Relates to UNDP and other UN Agencies and the Specific Issue of Animal Health Activities*, p. 3.

no treatment, were based on the organization of vaccination programmes and quarantines imposed in and around infected areas. Until 1950, when the use of vaccines began to reduce the incidence of the disease, some 2 million head of cattle were dying annually from the disease in Africa, Asia and the Near East. The disease has been eradicated in Europe, China and most other countries and did not affect humans.

Although most countries had previously had vaccination programmes, FAO work in rinderpest began as an inherited area from the UNRRA rinderpest control campaign begun in China in 1947. The work was then transferred to Thailand, where a successful immunization campaign was conducted and the control of rinderpest throughout Asia was planned. Regional cooperation, essential for containing disease, was arranged at a series of meetings. FAO also contributed to the introduction of the goat-adapted (caprinized) vaccine extensively used in India and other parts of Asia. FAO veterinarians helped to develop a vaccine that gave lifetime immunity against rinderpest.¹ In 1948, a major campaign against rinderpest was launched in Ethiopia. A laboratory was supplied with equipment to produce rinderpest and contagious pleuroneumonia vaccine. By 1953, more than 2.5 million cattle had been inoculated in that country.² The Nairobi Rinderpest Meeting held in October/November 1948, sponsored jointly by FAO and the British Colonial Office, resulted in a campaign to coordinate control in neighbouring countries spearheaded by FAO.³

1. Norris E. Dodd, *The United Nations Food and Agriculture Organization* (Portland, Oregon, Binford & Mort [1953], p. 35.

2. FAO, *Activities of FAO under the Expanded Technical Assistance Programme, 1953/54*, pp. 14-15.

3. Gore Hambidge, *The Story of FAO* (Toronto, D. Van Nostrand Company, 1955), p. 151.

At the 1965 FAO Conference, dissatisfaction was expressed at the slow progress on eradicating rinderpest. The fact that rinderpest continued to occur in Africa, Asia and the Middle East highlighted the limited, though useful, contribution FAO could make in these circumstances where the main responsibility lay with maintaining national veterinary services under the very difficult circumstances in developing countries. Rinderpest vaccination lasted the lifetime of the animal.

FAO veterinarians have assisted in emergency disease control, the development of vaccines, the establishment of laboratories and vaccine production facilities, the training at various levels and the organization of vaccination campaigns. In earlier years, immunization against rinderpest in campaigns was partly based on work done in Canada.¹ The transfer of such technologies was a major part of FAO's role.

A joint campaign against rinderpest (JP15 Campaign) was organized under the auspices of the OAU and its relevant technical bodies in 1962.² At first designed to ensure a clean and regular meat supply for the West Coast of Africa, the campaign was later extended to East Africa. In 1976, when the JP15 Campaign terminated, over 70 million head of cattle in 22 countries had been vaccinated. The effectiveness of the vaccination programmes was demonstrated in all the countries by the dramatic fall in the incidence of the disease, especially in western and central Africa, but the disease was not eradicated and in 1979, there was a resurgence of the disease in West Africa requiring international action once again. In 1981, FAO cooperated with five other international organizations: the EEC, the OIE, the OAU, the Cattle and Meat

1. *Canada and FAO* (Ottawa, Dept. of Agriculture, 1971), p. 21.

2. Ian MacFarlane, *The Joint Campaign Against Rinderpest*, UNDP/SF/FAO Near East Animal Health Institute, Regional Training Course on Diagnosis and Control of Rinderpest, Abbasia Laboratory, Cairo, Egypt on 14 December 1970, pp. 1-4.

Economic Community of the Council of the Entente States and the West African Economic Community to implement an emergency rinderpest vaccination campaign in ten countries in West Africa. The EEC, FAO, the bilateral aid agencies of the Federal Republic of Germany and France supported this campaign by providing over \$2 million in financial support.¹ The 1981 Emergency Campaign had been financially supported in 10 countries by FAO under its TCP. From 1980 to 1983, FAO provided technical assistance to 17 African countries through its TCP valued at \$6.6 million. In addition to the services of experts, funds covered the purchase of vaccines, vehicles, laboratory equipment, deep-freezes to improve diagnostic capability and vaccine production within countries. The countries that requested such assistance from FAO included Benin, Burundi, Cameroon, the Central African Republic, Chad, Egypt, the Gambia, Ghana, Mali, Niger, Senegal, the Sudan, Tanzania, Togo, Uganda and Upper Volta.

Although the emergency campaign proved effective, rinderpest remained enzootic in the Mali/Mauritania area and the Ethiopia/Sudan/Somalia area and therefore also threatened other states. Both international and inter-African organizations therefore called for its eradication from Africa. At a meeting organized by FAO jointly with the OAU and OIE in Nairobi in 1981, a vaccination campaign strategy for a Pan-African Rinderpest Campaign was discussed.² The proposed campaign involved the governments of 24 African states, FAO, OIE, the OAU and several aid agencies. Zones of intensive action were surrounded by buffer zones which were, in turn, surrounded by intermediary zones not directly involved in the rinderpest campaign.

1. *World Animal Review: Rinderpest*, special supplementary issue (Rome, FAO, 1983), p. 6.

2. *Report of the Joint FAO/OAU.OIE Meeting on Rinderpest Eradication in Africa, Nairobi, Kenya, 2-5 November, 1981* (Rome, FAO, 1981)

The Pan-African Rinderpest Campaign Operation and Funding document provided detailed information about the execution of the project.¹ In every country, the logistics of the campaign was always the responsibility of a national organizer who had veterinarians working in the field. The cattle were simultaneously vaccinated for contagious bovine pleuropneumonia. These two diseases were the two major contagious diseases in Africa and FAO has often vaccinated simultaneously for both diseases.

Although the Inter-African Bureau for Animal Resources of the OAU (OAU/IBAR) was the organization executing the campaign, FAO provided support by backstopping and monitoring the programme as well as coordinating the multilateral and bilateral donor interests.² Given the meagre resources for the immense problem, coordination of aid was imperative. A regional TCP project provided a one year expert to help the director of IBAR organize the Pan-African Rinderpest Campaign. FAO was on hand to see that the campaign was properly organized.

The funding document attributed the failure of JP15 to eradicate rinderpest to civil disturbances and other political factors, which resulted in inadequate follow-up so that rinderpest remained enzootic in several regions, especially in the Sudan and Ethiopia.³ Most important was the cessation of international funding immediately after JP15. Other contributing factors included the failure of countries to vaccinate

1. Organization of African Unity, Inter-African Bureau for Animal Resources, *Pan-African Rinderpest Campaign: Project Operation and Funding Document* (Nairobi, 1982), p. 67.

2. D.F. Bommer, 'Progress Report on the Pan-African Rinderpest Campaign', in [*Verbatim Records of the Plenary Meetings of the FAO Council Eighty-Fourth Session, Rome, November 3, 1983*, (Rome, FAO [1984], p. 7.

3. *World Animal Review; Rinderpest*, p. 8.

their calves annually with the result that, ten years after the campaign, herds were often not immune. The drought and famine have resulted in increased, and often completely uncontrolled, transhumant movement of herds. The recession, increased costs of supplies, equipment and fuel for vehicles have resulted in a deterioration of veterinary services. In the Sudan, the disease has spread over the entire country because of the failure to vaccinate calves. Nomadic cattle from the Sudan infected herds in Chad and the disease spread further south.

Was there any reason to believe that with the escalation of civil strife, as in the case of Ethiopia and the Sudan, any new campaign would be more successful in terms of total eradication than JP15, which was conducted during more peaceful years? It could be argued that TCP programmes were successful but then emergency aid invariably was since it extended for a only a short period of time and evoked fervent government action. In the longer term, however, governments tended to return to other priorities. Nevertheless, the danger existed that the disease could spread not only throughout Africa but to Europe and increase in Asia and the Near East. Because of the increased movement of slaughter cattle into Near Eastern countries from Africa, rinderpest outbreaks reappeared after 1979 in a number of countries.¹

The situation was clearly one that should not be neglected just because everything might not proceed as planned. If the WHO was able to organize the eradication of small pox, there was no reason why FAO and the OAU should not attempt eradication of rinderpest in the same countries.

1. K.V. Singh, 'Prompt Action Prevents the Spread of Rinderpest: the Example of Turkey'; *World Animal Review: Rinderpest*, p. 21.

On occasion, FAO was charged with responsibilities it can only partially deliver such as mobilizing finances for the rinderpest campaign. It has created awareness and organized donor meetings, but if governments did not wish to provide funds or give bilaterally, there was little FAO could do except help to coordinate donor interests. The World Bank funded only countries which had agreed to a structural adjustment programme.

Nevertheless, it could be argued that FAO as an intergovernmental agency was essential to coordination of all aspects of the campaign, from availability of expertise to accommodating political conflicts. Success was also dependent upon mobilizing the political commitment of governments to the campaign. Although the OAU was ostensibly executing the campaign, FAO's membership, including both African and non-African countries, could coordinate activities of donors and recipients.

FAO has arranged for an equipment engineer to help strengthen laboratory facilities for vaccine production in various countries. Arrangements have also been made for the Nippon Institute of Biological Science in Japan and the Animal Virus Research Institute in Plymouth, England to develop sera and diagnostic tests. Meetings and training courses have been organized. *A Manual on Rinderpest for Field Personnel* and a *Guide on Rinderpest Vaccine Production* have been prepared and the *FAO Manual on Laboratory Diagnosis of Rinderpest* first published in 1968 was updated.¹ The extent to which this information reached the relevant people would determine its usefulness. The special issue of *World Animal Review* on rinderpest should have helped in creating awareness and providing reliable information. More

1. 'Rinderpest: FAO's Contribution to its Control'; *World Animal Review*, no. 51, July-September 1984, P. 51.

basic studies such as a survey of rinderpest vaccines produced in Africa and a study of the role of wildlife with regard to the disease were also undertaken.

Rinderpest also reappeared in the Middle East and Asia. After 50 years, it reappeared in the Near East in 1969 and then again in a number of countries after 1979 (as previously mentioned). Although FAO took all possible steps within the powers and resources available, it could be questioned whether some countries in Asia and the Near East were paying adequate attention to rinderpest. The Regional Animal Production and Health Commission for Asia, the Far East and South-West Pacific had been giving priority in disease control to rinderpest in the Indian subcontinent. A coordinated campaign in the Near East, spanning from Egypt to Afghanistan, was not feasible,¹ due to adverse political conditions.

FAO has been active in individual countries. In Turkey projects funded by UNDP include a laboratory for the diagnosis of rinderpest at the Etlik Veterinary Control and Research Institute: five million doses of vaccine were available to meet the emergency in Turkey, which arose with the outbreak of the disease in Iran in 1982.

Given the infectious nature of the disease and the swift connections modern transport provided, rinderpest anywhere could prove a danger to all parts of the world. The same was true of foot-and-mouth disease.

FOOT-AND-MOUTH DISEASE

Foot-and-mouth disease (FMD) was a disease that was not as contagious as rinderpest, but outbreaks persisted in most parts of the world in spite of technical

1. The Resurgence of Rinderpest with Particular Reference to Africa', *World Animal Review: Rinderpest*, p. 8.

advances. The United States has been free since 1929 and, since the early 1950s, Canada and Central America.

The cooperative programme of U.S. technical assistance to Mexico wiped out the disease in Mexico in 1954 and FAO animal disease experts advised Central American governments on how to keep their countries disease free.

In earlier years, the Organization helped Greece, Austria, Turkey, Thailand, Indonesia, Bulgaria and Iran to establish vaccine production institutes. Assistance included preparing plans, supplying plant equipment, and assigning experts to train people to make the plants self-sufficient with regard to vaccine production. In some cases, such as Austria and Turkey, there was cooperation with U.S. bilateral assistance.

FMD has proven difficult to eradicate in Europe where FAO has been involved in trying to bring about control of the disease through international action since 1949. European governments and FAO organized cooperation on a regional basis in 1953. The European Commission for the Control of FMD was established by the FAO Conference in 1953 and held its first session the following July in Rome, its aim being to promote and coordinate national and international action for control and final eradication of the disease in Europe. It was a forum for information, policy discussions and coordination of efforts. Prompt confirmation of diagnosis was everywhere necessary. By mutual agreement of the commission and FAO, the Animal Virus Research Institute at Pirbright, United Kingdom was designated as the World Reference Laboratory for typing and strain differentiation of FMD viruses. Although most countries could now carry out their own diagnostic work, the laboratory dealt

with strains that were both new and established for Europe and helped countries that were not equipped to do their own diagnoses. Until 1967, when the disease was widespread, the Institute not only produced different kinds of vaccines but kept hundreds of thousands of doses in reserve for the Commission for emergency use.¹

The Commission headquarters were in Rome and its staff members were appointed by FAO's Director-General but it was financed by its members. Membership was open to European states that were members of FAO or the UN. The present membership included countries from both Eastern and Western Europe and facilitated technical cooperation between them. The Commission served as an agency that collected information regarding national programmes of governments and research on FMD. Through the Commission, governments could exchange information on outbreaks and determine the type, or types, of virus responsible in each case. It registered stocks of virus and vaccines in member countries. Members undertook to institute rigorous control through policies of vaccination, slaughter of infected animals and vaccination in zones surrounding outbreaks.

The concerted efforts of European governments have led to a remarkable reduction in the incidence of the disease. Since 1953, there have been programmes of mass vaccination in many countries in both Eastern and Western Europe, the work of the Commission having been a contributing factor.

In 1962, FAO was instrumental in organizing a buffer zone in south-eastern Europe to protect the continent from the invasion of exotic types of FMD virus.² In

1. *Report of the Twenty-Fourth Session of the European Commission for the Control of Foot-and-Mouth Disease held in Rome, 7-10 April 1981* (Rome, FAO, 1981), p. 101.

2. *Report of the Twenty-Fourth Session of the European Commission for the Control of Foot-and-Mouth Disease held in Rome, 7-10 April 1981*, p. 53.

response to solicitation from the Director-General of FAO, the EEC and other European countries have contributed funds for its maintenance. In the two decades from 1962 to 1984, vaccine valued at over U.S. \$8 million had been supplied to effectively maintain the buffer zone. This programme was coordinated by the Commission and FAO, with the advice of a tripartite FAO/EEC/OIE Committee.

Assistance in vaccine production has been provided to Turkey and Bulgaria in projects funded by the UNDP but executed by FAO. In Bulgaria and Turkey, UNDP funds have provided the equipment for the necessary large-scale production of vaccines. In Turkey, additional funding has been provided by the EEC for the necessary equipment to produce adequate vaccine to control FMD in the country.

Outbreaks due mainly to indigenous sources of infection, including escape of viruses, still persisted in Europe. Disease security was handled in 25 or more laboratories in Europe and was monitored in other parts of the world, from which infection might be introduced into Europe, especially through trade in meat and livestock. Infection in Italy in the 1980s, for example, was attributed to imported meat and animals from South America. Unregulated importation of meat and livestock from Asia to the Near East and the general political situation has endangered not only that region but also south-eastern Europe. Europe would continue to be exposed to infection until the epizootics were controlled at their source on all continents. FAO has, therefore, encouraged and supported programmes for FMD control wherever governments have shown interest. For example in 1981, TCP assistance was provided in Argentina, Lao, Peru and the Republic of Korea for the control of FMD.¹

1. *FAO in 1981* (Rome, FAO, 1982), p. 21.

FMD did not kill cattle but it was debilitating. Its treatment in developing countries was regarded of importance, primarily where meat was exported. Most African countries, for example, did not export meat and, given all their problems and animal diseases such as rinderpest and trypanosomiasis, accorded lower priority to FMD, but the disease was widespread and affected the dairy industry and draught animals.¹ The Organization has encouraged regional production of vaccines in order to assure vaccines meet the highest standards and were available to all countries in the respective regions and globally. A consultation on the regionalization of FMD vaccine production was held at FAO headquarters in July 1974. As an international organization, FAO was in the best position to stimulate and coordinate regional action with a view to global coordination. When an exotic strain of FMD virus appeared in Northern Africa, FAO sent vaccine for immediate use. It then helped to set up a pilot vaccine production plant at Abbassia in Cairo with UNDP funding.²

Advancing the concept of regionalization by such acts as providing some technical assistance, information and equipment was the extent of FAO's power. In the Near East, the political situation has seriously hampered the development of national laboratories. The FMD Institute in Iran was supplying the region in general and maintaining buffer zones in southeastern Europe and also in Bulgaria and Turkey.

The respective regional commissions have also been active. One of the purposes for advancing the establishment of the Animal Production and Health Commission in the Near East in 1967 was to combat FMD. Preliminary steps for a long-term programme were taken by the Middle and Near East Regional Animal Production and

1. *Strategies for Animal Health in Africa*, p. 4.

2. *FAO in 1977* (Rome, 1978).

Health Project executed by FAO. In the early 1980s, the Regional Animal Production and Health Commission for Asia, the Far East and the South-West Pacific focused on control and eradication of the disease. These commissions were statutory bodies of FAO. In 1981, the South American Commission for the control of FMD, which was not a statutory body of FAO, prepared strategies for the control of FMD in South America for a decade. In South America, diagnostic work in all national laboratories was carried out according to standards set by the Pan American Centre for FMD in Brazil.

A strategic international European vaccine bank has been established in the United Kingdom. The vaccine reserve was of primary interest to European countries that were disease-free and to countries such as Australia, Japan and New Zealand, which were disease-free and outside of Europe with its cooperative accumulated skills.

FAO was also concerned with training courses in various regions. For example, in 1982, FAO organized a seminar on FMD in Ankara, Turkey for the Near East region and a training course on FMD Diagnosis and Control for Laboratory Workers in southern African countries was held in Botswana and many other such courses were held.

EMERGENCY DISEASE CONTROL

FAO has, since its earliest days, provided a swift response in the event of the sudden outbreak of a contagious disease within countries, facilitated by TCP. Swift action continued to be necessary even in countries where animal health services were

reasonably developed such as the Philippines and Egypt. An emergency mission to the Philippines helped to deal with an FMD virus that was new to that country.¹ Egypt required emergency help in order to cope with Rift Valley fever in 1977, a zoonotic disease easily transmitted to people. In Egypt, animal health services were conducted with a view to first protecting human health.

FAO's response to emergency situations was well illustrated by the action taken during the sudden outbreak of African swine fever in Malta, Sardinia and in affected countries of Latin America and the Caribbean in 1978 and 1979. At the national level, technical assistance in diagnosis was provided to 15 countries in Latin America within one month. Such swift action would not have been possible under UNDP procedures.² With TCP funds, diagnostic laboratory equipment was supplied to Brazil and the Dominican Republic. The latter also received field control support.

Substantial progress was made in strengthening the diagnostic and quarantine facilities in all endangered countries. African swine fever was a lethal disease for which no animal vaccine existed to immunize animals. Its presence in some countries therefore threatened swine populations in other countries, especially Latin America and the Mediterranean Region. There was also the danger of the disease spreading to the United States and further within Europe, where, two decades earlier, the disease had spread from Africa to Portugal and Spain. Outbreaks have also occurred in the past in France and peninsular Italy.

The swine populations of Malta, the Dominican Republic, Sao Tomé and Cuba were slaughtered in order to eradicate the disease and prevent its spreading.

1. *FAO in 1975* (Rome, FAO, 1976), p. 15.

2. *FAO as it Relates to UNDP and other UN agencies and the specific Issue of Animal Health Activities*, [U.S.D.A.], 1980, p. 3.

Eradication of herds was also undertaken in other infected countries such as Haiti and Brazil. FAO was in a position to urge and supervise the slaughter of herds. The governments decided to eliminate their swineherds with the assistance of projects executed by FAO. Had the United States State Department or USAID recommended such action in Latin America, it might have been interpreted as imperialism or even ignored. Similarly, the EEC financed the project for the eradication of African swine fever in Malta but the project was executed by FAO.¹ FAO was perceived as being impartial and objective when politically sensitive issues were concerned. Restocking programmes have been undertaken in both the Dominican Republic and Malta as part of the final stages of the eradication programmes.

The FAO Regional Conference held in Latin America in 1978, had designated the FAO as the agency to take the lead role in coordinating activities pertaining to animal health in the Western Hemisphere. In collaboration with the Pan American Health Organization, FAO convened a technical consultation in Lima, Peru, to decide upon emergency measures against African swine fever.² In view of the deadly nature of the disease, all member nations were urged to implement measures to prevent the entry of contaminated pork into their countries. The International Civil Aviation Organization and the Inter-Governmental Maritime Consultative Organization were asked to appeal to planes and ships. To prevent obstruction to trade of uncontaminated meat, a group of international experts formulated guidelines to identify meat which might be infected.

1. *FAO in 1980* (Rome, FAO, 1981), p. 29.

2. *FAO in 1978* (Rome, FAO, 1979), p. 30.

Other emergency measures taken by FAO included the organization of national and regional training courses.¹ National programmes for preparedness were strengthened, including public education campaigns, utilizing audio visual aids. The ASF newsletter enabled FAO to provide governments with information. FAO also took steps to coordinate research, namely \$3 million to support a cooperative research programme involving laboratories in Europe, the United States and Brazil to develop a vaccine for the disease. This project was conceived at a meeting convened by FAO in 1979 to consider the research needs involved in producing a vaccine.

Drawing on the experience of the successful TCP projects in 15 Latin American countries, a regional project financed by UNDP and executed by FAO was undertaken.² The project, located in Santa Domingo in the Dominican Republic, monitored African swine fever there and in other parts of Latin America. It also organized intensive training courses and seminars for laboratory technicians, field veterinarians and national service chiefs from regional countries. This project also dealt with other exotic diseases. An Italian trust fund project to prevent African swine fever began operation in Andean Pact countries in July 1983.³

Realizing that an ounce of prevention in animal health is worth more than a pound of cure, FAO has trained countries in emergency preparedness for exotic diseases. In 1980 FAO convened an Expert Consultation on Emergency Disease Control, which recommended the establishment of national task forces and the identification of sources of assistance should outbreaks occur. As a follow-up, FAO trained a core

1. FAO, *Animal Health: National and International Strategies of Action*, p. 8.

2. *FAO in 1981*, (Rome, FAO, 1982), p. 35.

3. *FAO in 1984*, (Rome, FAO, 1985), p. 26.

emergency task force in every country and compiled a manual on emergency disease control.

TRAINING

The shortage of trained veterinarians was one of the main constraints in building up a viable veterinary service in developing countries, especially in Africa. Some countries were overcoming this problem by introducing more animal health assistants and auxiliary personnel, who often had more direct contact with rural populations than veterinarians (see previous sections on FAO's role).

Training at both university and intermediate levels has been an integral part of all field projects. In 1981, FAO offered 206 fellowships for individual training of selected veterinary specialists in various subjects under field projects.¹ Training in specific subjects was seen as more effective in cost-benefit terms than academic training for higher degrees. An earlier example was the regional veterinary investigation laboratory and 6 associated clinical centres established in Kenya by an FAO executed project funded by the Danish International Development Agency (DANIDA). In addition to buildings and equipment, the project provided in-service training for the Kenyan staff which, after 5 years in 1978, was able to operate the laboratory independently.² It should be added, however, that but for the support of GTZ during the 1980s, the institution would not have been able to continue functioning. Danish and Swedish development agencies have also cooperated with FAO in sponsoring 5 permanent post graduate training centres for veterinarians since

1. FAO, *Animal Health: National and International Strategies of Action*, p. 3.

2. *FAO in 1978*: (Rome, FAO, 1979), p. 30.

1971 to provide courses. A large number of veterinarians have been trained in these courses both in pathology and veterinary public health.

FAO has also sponsored international meetings on training and education. Training requirements were complex, varying from country to country with refresher courses necessary at all levels in order to acquaint staff with recent advances in animal health technology. As early as 1968 an ad hoc meeting on the training of animal health assistants was convened in Lebanon to coordinate veterinary education activities for UNDP/SF projects in the Near East and East Africa. The Fourth Meeting of the FAO/WHO Experts Consultation on Veterinary Education was held in 1976 and an expert consultation on veterinary education and training in Africa in 1984.¹

In spite of all the efforts in training over the years by bilateral agencies and FAO, in 1985 only a quarter of the world's total veterinarians were working in developing countries. In part, this was due to the fact that highly-trained staff often lacked facilities or moved to other jobs. As mentioned above (section on animal trypanosomiasis), the quality of the training cannot be verified. Also governments did not necessarily always nominate the best professionals for training.

Meetings and Standards

The first FAO/OIE International Meeting on Hog Cholera and African Swine Fever was held in Rome in 1965. Other international meetings on various diseases have been organized to further the cause of disease control over the years as mentioned in the examples given in previous sections.²

1. FAO, *Animal Health: National and International Strategies of Action*, p. 3.

2. FAO, *Animal Health: National and International Strategies of Action*, p. 14.

A series of regional seminars were organized by FAO on vaccine production. Only if vaccine production, diagnostic tests and disinfection procedures and certain other aspects of veterinary services could be standardized, could veterinary regulations be standardized. The roles to be played by national veterinary services have been summarized in the FAO publication *Standard of Veterinary Services*. Of particular importance was the improvement of diagnostic competence, for which many countries continued to lack the necessary laboratory facilities. FAO has helped to develop a global network of international reference laboratories to assist countries with diagnosis. The role of the Animal Virus Research Institute at Pirbright, United Kingdom has already been mentioned above with regard to foot-and-mouth disease: it also served as the reference laboratory for rinderpest, PPR, blue-tongue and African horse sickness. The Central Veterinary Laboratory at New Haw, Surrey, United Kingdom was FAO recognized laboratory for Newcastle disease, avian influenza and brucellosis. The Indian Veterinary Research Institute at Izatnagar, India was also designated as a reference laboratory for brucellosis. There were various other laboratories for other diseases in the United States and Europe.

INFORMATION SOURCES

FAO was a unique source of information on animal health. Not only was FAO one of the few organizations in a position to collect information from all nations, but this information was of immediate concern to all nations. In the world of modern transportation, an outbreak of any contagious animal disease was a danger to animals everywhere and in the case of zoonoses to people also.

Through an agreement signed in 1953, the OIE and FAO cooperated in collecting and disseminating information on the occurrence of transmissible animal diseases and the coordination of their control. This information was published in collaboration with the WHO in the FAO/WHO/OIE *Animal Health Yearbook*. FAO and the OIE issued their first tabulation of the incidence of 100 animal diseases from over 80 countries in 1957.

The *Animal Health Yearbook* by 1983 comprised information from 172 countries; it helped governments prevent and control disease and provided a basis for decisions on inter-country trade in animals and their products.¹ Such trade to Europe and the United States from most Latin American countries and other developing countries was banned because of animal disease. The problem with the publication of such information by an intergovernmental organization was that it could only publish information which was the official position of governments. If a government denied the outbreak of a certain disease, FAO could not contradict it but might refuse to declare a country disease-free on the basis of examining a few hundred or thousand animals out of the total livestock population.

In many countries, infrastructure for the national and international reporting of disease now existed but required improvement in quality. The actual animal health situation was often only partially known. Improvement in the quality of data depends upon better training of more personnel, efficient diagnostic services and adequate communication facilities.² Until these objectives were attained, the information FAO received from governments to transmit will always be imperfect.

1. FAO/WHO/OIE, *Animal Health Yearbook, 1983*, (Rome, FAO, 1984)

2. FAO, *Animal Health: National and International Strategies of Action*, p. 15.

In order for animal disease control to be effective, certain standards with regard to veterinary legislation must be maintained and FAO published information thereon. Information on non-tariff barriers to international trade in meat, arising from health requirements and the movement of animal semen in international trade was compiled. An international organization provided this service better than most countries would be able to. The FAO/WHO Codex Alimentarius Programme has prepared a new International Code of Practice for Ante-mortem and Post-mortem Judgement of Slaughter Animals and Meat.

The *World Animal Review* was a journal issued quarterly by FAO and intended primarily for the livestock industry of developing countries. It was mailed to several thousand institutions in developing countries on request. Various manuals, handbooks, guidelines and other publications were also published. The manuals prepared to help with the control of rinderpest have already been mentioned, as have the documents on trypanosomiasis. A news service also existed for both. Similar publications existed for other diseases. A series of technical papers on animal diseases has been published in English and French and, in some cases, also in Spanish. For example, *East Coast Fever and Other Tick borne Diseases*, published in 1980, was based on the results of FAO/UNDP projects executed over a 10-year period in East Africa.¹ The results of these efforts have therefore been made widely available. The *Report of the FAO/EEC Expert Consultation on Eradication of Hog Cholera and African Swine Fever* held in Hanover, West Germany in 1976, gave a review of the progress made in research and in the control of both diseases in Europe in order to facilitate their removal from the European continent.

1. *FAO in 1981*, (Rome, 1982), p. 34.

CONCLUSION

Essential to animal disease control were national veterinary services and interstate cooperation such as coordination of vaccination campaigns. The industrialized countries were free of most of the major epizootic diseases, of which those that posed the greatest problems were rinderpest, FMD and African animal trypanosomiasis. The first two were the focus of major international campaigns while trypanosomiasis had been receiving attention. FAO initiated the Programme for the Control of African Trypanosomiasis and Related Development. Its role was primarily coordination of the activities of African governments, donors and research institutes in cooperation with the WHO, the OAU and other organizations. To provide policy guidance for the programme, FAO established a Commission on African Animal Trypanosomiasis in 1979 to review and advise on national and international programmes. Shortages of trained staff and money were held to be the two greatest obstacles to progress in establishing control. In many West African countries, livestock has developed tolerance to trypanosomiasis through natural selection. Research on trypanotolerant cattle has been undertaken by FAO, the ILCA and ILRAD.

Some diseases, such as rinderpest, were easier to control with more quantifiable results in the short term. Control and eradication of rinderpest, for which there was no treatment, were based on the organization of vaccination programmes and quarantine imposed in and around infected areas. A joint campaign against rinderpest was organized under the auspices of the OAU in 1962. In 1976, when the JP15 Campaign terminated, over 70 million head of cattle in 22 countries had been vaccinated. The

incidence of rinderpest fell in all their countries and was eliminated in some for a number of years.

After 1979, there was a resurgence of rinderpest in West Africa. In 1981, FAO organized international action once again. Between 1980 and 1983, FAO provided technical assistance to 17 countries through its TCP. In 1981, a vaccination campaign strategy for a Pan-African rinderpest campaign was discussed. Although the IBAR of the OAU was the organization responsible for executing the campaign, FAO provided support by backstopping and monitoring the programme as well as coordinating donor interests.

FMD was not as contagious as rinderpest but has been difficult to eradicate in Europe. The European Commission for the Control of Foot-and-Mouth Disease was established by FAO during the 1953 Conference and had its headquarters in Rome. Members undertook to institute regional control through policies of vaccination, slaughter of infected animals and vaccination in zones surrounding outbreaks. Europe would continue to be exposed to infection until the epizootics were controlled at their sources in all countries.

In 1978 and 1979 there was an outbreak of African swine fever in Malta and Central America. Herds were slaughtered under the supervision of FAO. One of the main constraints on control of animal disease in developing countries was the lack of trained veterinarians. Again, training proved to be an integral part of all field projects. Information was published on all the animal diseases that FAO dealt with. By 1983, the FAO/WHO/OIE *Animal Health Yearbook* comprised information on transmissible diseases from 172 countries.

Overall, efforts made by FAO with regard to animal health and to plant pest and disease control benefited all nations by preventing disease from spreading beyond borders to more countries.

CHAPTER 8

FAO AND FISHERIES: CASE STUDY 2

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INTRODUCTION

This chapter examined FAO's role with regard to fisheries, concentrating on the period 1970 to 1985. It set the background for FAO's activities and its operation through its regional fishery commissions. It also elaborated on some FAO programmes to demonstrate FAO's catalytic and coordinating role in all aspects of fisheries from resource assessment, exploitation, handling and marketing to safeguarding marine resources against pollution. The efforts of FAO to help governments come to terms with expansion of national jurisdiction as a result of the United Nations Convention on the Law of the Sea were discussed. The extensive work on marine mammals will not be considered here. All of FAO's work, as in other sectors, depended upon cooperation with governments, other UN organizations and multilateral and bilateral organizations. Industry, as well as scientific organizations was involved in the field of fisheries. What have the contributions and achievements of FAO's leadership and cooperation been? What general weaknesses and failures did reflection on former activity of the organization reveal? This chapter answered these questions.

Fisheries was FAO's most international subject since, until the change of the Law of the Sea, fisheries had existed in international waters. Whatever the extension of

national jurisdictions, stocks of course migrated along coastlines and beyond national boundaries into the high seas. Some species of tuna, for example, migrated hundreds and thousands of miles. Until 1979, approximately 90 percent of world fish production was harvested from marine waters.

BACKGROUND

Fishing was one of the most ancient professions, requiring initially only a hook or spear. Since WWII, the development of advanced harvesting techniques has transformed it into a highly commercial industry. As a result of the discovery and introduction of modern, synthetic fibres and of the development of the technique of freezing and canning at sea, modern fishing vessels capable of covering vast distances were designed and put into operation. World fish production expanded from an annual harvest of less than 20 million tons in the late 1940s to 65 million tons in 1970.¹ Since 1970, the rate of growth in catches has risen at one percent per year, reaching 75 million tons in 1984 with 55 million tons consumed as food. There was some concern as to how the expected demand of between 90-95 million tons by 2000 might be met. It was expected that much of the growth in demand would come from developing countries, which consumed over 60 percent of the fish catch.

Expansion of fisheries began during the administration of Director-General B.R. Sen. Although FAO had been providing statistical and technical assistance to countries since its inception, staff and finances were inadequate if FAO was to provide the coordination and guidance that member states required. Concern

1. Jean Carroz, 'World Fisheries Face Change and Challenges', *Mazingira*, vol. 8, No. 3, July 1984, p. 17.

expressed at the 1963 Conference enabled Sen to argue for raising the Division to a Department in 1965. The 1963 Conference instructed Sen to prepare proposals to ensure that FAO would, in the future, become the leading intergovernmental body in 'encouraging the rational harvesting of food from the oceans and inland waters'.¹ It retained that status today, with a sizeable multidisciplinary fisheries staff. Although the World Bank and the Inter-American Development Bank have provided substantial finances for fisheries development, they had only a few professionals and continued to rely on the FAO Department of Fisheries and other institutions for the necessary expertise.² Between 1964 and fiscal 1981, the World Bank loaned \$259 million for 27 fishery projects.

A Committee on Fisheries (COFI) comprised of fishery experts and administrators was established as a permanent committee of the Council in 1965. Originally consisting of 35 members, since 1975 it has been open to all member states and during the 1984-85 biennium, its membership comprised 82 countries. The Committee, as the only global coordinating body on fisheries, reviewed policies and sought solutions to problems with a remit to advise FAO.³ It was not to duplicate the work of existing regional and international bodies.

In 1965, the Field Programme was about twenty times the size of the Regular Programme, as fishery projects executed for the UN Special Fund increased. As a result, the Regular Programme staff was spending half its time servicing the Field Programme and neglecting the Regular Programme, which was to provide the basis

1. *Report of the Conference of FAO, Thirteenth Session, 20 November – 9 December, 1965* (Rome, 1966), p. 78.

2. World Bank, *Fishery Sector Policy Paper* (Washington, D.C. 1982), p. 9.

3. *Report of the Conference of FAO, Eighteenth Session, 8-27 November, 1975* (Rome, 1976), p. 40.

for the Field Programme. This problem continued with technical staff in general spending 30 to 40 percent of their time backstopping field programmes in 1983, despite a subsequent decline in backstopping per expert in fisheries.¹ The Regular Programme activities also included assistance to governments in the field with project formulation and resolving technical problems.² The work of the two Programmes was interwoven. Collection, analysis of statistics and resource studies was the work of the Regular Programme. It also assisted the dissemination of publications, training courses and workshops.

The role of FAO in fisheries as set out in its Constitution was, broadly speaking, as in other fields, to improve the nutrition and well-being of rural populations and the promotion of economic development. As in other fields, it has been primarily catalytic and coordinating. FAO has provided assistance on most aspects of fisheries such as mechanization of small craft, design of vessels, harbour construction, fishing gear, procedures, resources assessment, conservation, exploitation of under-utilized species, reduction of waste from catches and post-harvest losses, marketing and processing upon requests from governments. Its work was unique in that a substantial part of it had, until 1979, been concerned with the rational use of fishery resources in international waters.³ Conservation in international waters could only be attempted by a multilateral approach that ultimately benefited countries in general.

For over 300 years, since Hugo Grotius, until the extension of national jurisdiction as a result of the United Nations Convention on the Law of the Sea, freedom of fishing was regarded as a basic part of freedom of the seas. Any country

1. FAO, *Review of the Regular Programme 1982-83* (Rome, 1983), p. 58.

2. FAO, *Review of the Regular Programme 1978-79* (Rome, 1979), p. 34.

3. United.States, *United States Objectives in FAO* (Washington, D.C., 1970), pp. 13-14.

could fish in waters beyond the coastal state jurisdiction of from three to twelve miles. It was therefore not surprising that with the development of modern fishing operations, especially in the Western world, over-fishing led to the depletion of certain stocks such as Atlantic herring and Atlantic cod. Numerous other species such as hake have also been over-exploited.¹

REGIONAL FISHERY BODIES

Concerns about over-fishing led to the establishment of various fisheries bodies to regulate fishing, mostly after World War II. But what could these fishery bodies do without legal authority to enforce conservation if they must depend upon exhortation and the good will of fishermen and governments? The International Whaling Commission was a success story here. The International Whaling Commission was established in 1946 as whaling was the first fishing industry to be highly mechanized and expanded with consequent resource depletion. When problems continued, FAO was asked to conduct an independent review of the situation in 1959, resulting in the formation of new regulations by the commission. Director-General Sen also cautioned member states against excessive concern with short-term interests to the detriment of conservation for future generations. This was in effect the beginning of FAO assuming responsibility on behalf of the international community for the activities of international bodies which regulate fisheries.² More recently, as concern for conservation has dominated the Whaling Commission, FAO has been pointing out

1. FAO Fisheries Dept., Marine Resources Service, *Review of the State of World Fishery Resources*, 2nd edn., FAO Fisheries Circular no. 710 (Rome, 1981).

2. R. Sen, *Towards a Newer World* (Dublin, Tycooly International Publishing Ltd., 1982), p. 232.

that whales were a resource to be harvested in a controlled manner.¹ In 1982, the majority of the commission's members voted to end all commercial whaling after 1985.²

Various other regional and international organizations were established other than under FAO auspices. Some commissions, such as the North-West Atlantic Fisheries Organization and the North-East Atlantic Fisheries Commission, covered regions while others such as the International Pacific Halibut Commission and the International Commission for the Conservation of Atlantic Tunas (ICCAT) were established to regulate species. FAO engaged in joint activities with these bodies and FAO staff attended their meetings. Where developed countries only were concerned, such as in the North Atlantic and the North Pacific bodies, FAO has not participated much for some time because of competing demands on staff time. FAO staff, however, continued to participate in the work of ICCAT and the International Commission for the South-West Atlantic Fisheries where their participation has helped developing countries to balance their interests with more experienced delegates from industrialized countries.

FAO provided a mechanism through which the activities of the independent fishery bodies, as well as those under FAO auspices, national activities and the work of various other organizations such as UNESCO's Intergovernmental Oceanographic Commission (IOC) could be coordinated. It has been cooperating with the IOC since its foundation. In 1982 they co-sponsored a programme for Ocean Science in Relation

1. FAO, *International Collaboration in Research, Management and Development Including the Role of FAO, Committee on Fisheries, Fifteenth Session, Rome, 10-19 October, 1983*, COFI/83/10, (Rome, 1983), p. 11.

2. Maxime Ferrari, 'Of Whales and Politics', *Ambio*, Vol. 12, no. 6, 1983, p. 347.

to Living Resources in order to promote a closer relationship between academic marine scientific institutions and fisheries institutions. FAO also cooperated with UNEP, WMO, WHO and other United Nations organizations, OECD and other independent organizations. There was a Codex Committee on Fish and Fishing Products to develop world-wide standards to protect the consumer's health and to ensure equitable trade practices in fisheries that had a high volume of international trade. The Joint FAO/WHO Food Standards Programme, the Codex Alimentarius Commission, is discussed in Chapter 6.

Much of the work of the Department of Fisheries has been conducted through FAO regional bodies. Nine regional fisheries organizations whose membership is drawn primarily from the Third World have been established under the auspices of FAO. It is highly unlikely these developing countries would have organized these commissions without FAO initiatives. FAO had staff in possession of legal and other training, which was deficient in a number of newly independent countries. In fact, many developing countries continued to require legal assistance in order to assume responsibility for their exclusive economic zones.¹

The first of these commissions, the Indo-Pacific Fishery Commission, was established in 1948. The various regional commissions established under FAO were as follows:-

CARPAS	Regional Fisheries Advisory Commission for the South-West Atlantic, 1961
CECAF	Fishery Commission for the Eastern Central Atlantic, 1967

1. FAO, *Report on the Programme of Assistance in the Development and Management of Fisheries in the Exclusive Economic Zones, Committee on Fisheries, Fifteenth Session, Rome, 10-19 October, 1983* COF1/83/14 (Rome, 1983), p. 3.

CIFA	Committee for the Inland Fisheries of Africa, 1971
EIFAC	European Inland Fisheries Advisory Commission, 1957
GFCM	General Fisheries Council for the Mediterranean, 1949
IOFC	Indian Ocean Fisheries Commission, 1967
IPFC	Indo-Pacific Fisheries Council, 1948 (renamed Indo-Pacific Fisheries Commission in 1976, approved by FAO Council 72nd Session, 1977)
WECAFC	Western Central Atlantic Fishery Commission, 1973
COPESCAL	Committee for the Inland Fisheries of Latin America, 1976

Political conflicts between nation states might have been an obstacle had FAO not organized these commissions. Israel has been cooperating with the Arab states as all are members of the General Fisheries Council for the Mediterranean. In Europe, where the skills for fisheries development were widespread, activities were coordinated by the European Inland Fisheries Advisory Commission. The Commission facilitates cooperation between countries in Eastern and Western Europe.

The FAO regional commissions were open to all FAO members who wished to join. Developed countries such as the United States, the United Kingdom and Australia belonged to the IOFC and the IPFC as did the developing countries in these regions. Although this has been an advantage scientifically, coastal governments have sometimes been reluctant to take management and other policy decisions in the

presence of non-coastal states.¹ The establishment of exclusive economic zones, furthermore, led to the dangers of infringement upon national sovereignty. Therefore, governments requested a reduction in the management powers of the fisheries bodies.² This was despite the fact that they already had very limited authority. FAO was promoting the creation of sub-regional committees in natural management areas such as areas with common problems, potentials and other factors such as language or traditions as in the Bay of Bengal. The first such adjustment occurred when CECAF, which covered the area off West Africa from Zaire to Morocco, established a sub-committee for management of resources in December 1972 open only to the coastal nations of the region. Sub-Committees existed in the South China Sea, the Bay of Bengal, the Gulfs, the South West Indian Ocean and the Lesser Antilles.

FAO fishery commissions have experienced similar problems as those established outside of the auspices of FAO. Broadly speaking, their activities have been limited by a lack of funding and the reluctance of governments to allow them any real authority.³ Nations lacked the incentive to rationalize fishing as competition encouraged exploiting common stocks for immediate gain.⁴ Before the regime of the Ocean, all fleets rushed to the best fishing grounds. Third World countries were reluctant to see regulations enforced as they began developing their fleets.⁵ The regional fishery commissions have functioned well with regard to the collection of

1. FAO, *International Collaboration in Research, Management and Development Including the Role of the FAO*, p. 7.

2. FAO, *Changing Role for International Fisheries Organizations* (Rome, 1984), p. 5.

3. Tony Loftas, 'FAO's EEZ Programme', *Marine Policy*, vol. 4, no. 3, July 1981, p. 232.

4. Evan Luard, *The Control of the Sea-bed: Who Owns the Resources of the Oceans?* (London, Heinemann, 1977), p. 8.

5. Luard, *The Control of the Sea-bed*, p. 66.

data, information exchange and stimulating other forms of international cooperation.¹ This was surprising given the deplorable state of some of the information. It did not include small-scale fisheries, as this thesis notes (see last paragraph in section on Small-scale Fisheries in this chapter).

They facilitated the exchange of detailed data on catches, landings, fishing effort and on biological data on fish stocks. Statistical data collected and analysed under the auspices of an international fishery organization were necessary for agreements between coastal governments and foreign vessels fishing in their waters. Both parties then accepted them as objective data.² These regional bodies assisted in allocating stocks shared by two nations and those that straddled the exclusive economic zones and the high seas beyond. They also stimulated joint research programmes and information exchange among scientists in various regions. Regional research programmes included FAO's Aquaculture Development and Coordination Programme (discussed later in this chapter) and the Indo-Pacific Fishery Commission (IPFC) Cooperative Programme in Fish Technology, supported by the Australian Development Assistance Bureau and other agencies. FAO's programme stimulating research cooperation on hake in Argentina, Chile, Peru and Uruguay from 1977-1981 resulted in findings on the keeping time of chilled and frozen South American hake. This knowledge has been applied by government bodies and industries to improve regulations and production.³ The regional commissions served a particularly useful purpose in balancing the uneven distribution of expertise, experience, technical and

1. FAO, *World Conference on Fisheries Management and Development, Rome, 27 June to 6 July, 1984, Draft Strategy for Fisheries Management and Development and Associated Programme of Action*, FAO, Rome, 1984, p. 18.

2. FAO, *Changing Role for International Fisheries Organizations*, p. 6.

3. FAO, *Review of the Regular Programme 1982-83* (Rome, 1983), p. 181.

financial resources in the region. In developing areas, national expertise was limited and a regional pool of expertise essential. Furthermore, research and testing in design of fishing vessels could be too expensive for owner builders or even some governments.¹ With regard to research vessels, the UNDP/FAO had a Fishery Vessel Pool but additional cooperative measures could be arranged especially with developed countries for countries that did not possess such vessels.

In the past, technical assistance has been channelled through regional or sub-regional projects linked to fisheries commissions. There was a need for better coordination between bilateral and multilateral cooperation programmes if scarce resources were not to be wasted through duplication of effort. Discussions at regional meetings have also helped funding agencies to gather general ideas from which to formulate more detailed projects. This process has proven more useful than presenting projects to these meetings.

Although their direct management role has decreased with the extension of national jurisdiction, the regional commissions remained useful, because the need for international cooperation continued, especially where shared stocks and expertise are concerned.² Formal action to harmonize policies and access conditions by the nations of a region was particularly important with regard to foreign vessels fishing in exclusive economic zones (EEZs). The structure of the commissions was, however, not appropriate for trade that required an inter-regional approach, involving access to markets and processing.

1. Gove Hambidge, *The Story of FAO* (London, Van Nostrand, 1955), p. 220.

2. FAO, *International Collaboration in Research, Management and Development Including the Role of FAO*, pp. 1-11.

Several of the regional commissions have had regional fisheries programmes linked to them, involving the entire range of activities in the fisheries sector from assessment to exploitation and conservation. Most of these have, however, been terminated since the reduction in UNDP funding, their principal source of finance, because coastal states were reluctant to give priority to regional projects and, therefore, these projects have not attracted donors.¹ The Western Central Atlantic Fishery Commission Project and the Indian Ocean Programme associated with the Indian Ocean Fishery Commission ended in 1981, while the CECAF project in West Africa and the South China Sea Programme were terminated due to financial constraints.

Because of action by member governments supported by regional technical assistance projects, FAO regional fishery bodies, especially the CECAF and IPFC, contributed to improving the knowledge of shared stocks and coordinating their management. The CECAF has carried out a comprehensive assessment of major fishery resources in its area. This was made possible in part by the development of local capability for resource assessment and statistical work in member countries, such as the Ivory Coast, Mauritania, Morocco, Nigeria and Senegal.²

THE INDIAN OCEAN PROGRAMME

The Indian Ocean Fishery Survey and Development Programme (IOP), which became operational in 1971, was the first of the UNDP/FAO inter-regional fishery development and management programmes. It was developed at the first meeting of

1. FAO, *International Collaboration in Research, Management and Development Including the Role of FAO*, p. 7.

2. FAO, *Review of the Regular Programme 1982-83*, p. 170.

the Indian Ocean Fishery Commission held in September 1968. This Programme was regarded as a model of international cooperation in fisheries development.¹ Only an impartial international programme could have organized activities and collaboration between countries on the scale that the IOP did.

The IOP assisted in nearly every phase of fisheries development in the region.² In the early years, emphasis was on basic studies and resource surveys. Resource surveys were conducted from East Africa round to North West Australia. The Russian research vessel Professor Mesysatsev was chartered by FAO to survey the Western Indian Ocean fishery resources off the eastern coast of Africa, while another project identified demersal and pelagic fisheries in countries bordering the Persian Gulf. The Norwegian research vessel Dr Fridtjof Nansen assessed the pelagic fish in the North Arabian Sea. Finally, Australia, Germany, the city of Bremen and Indonesia cooperated in the Joint Eastern Indian Ocean Fishery Survey in 1979 to explore the southern-eastern Indian Ocean about which very little was known.

Surveys were followed by assistance in fisheries development, consisting of formulating programmes and projects and providing technical assistance. For example, in Oman, the IOP helped to establish the Oman National Fishing Company.

In Pakistan, work was begun on determining how to exploit the large stocks of mesopelagic fish revealed by the Fridtjof Nansen survey. The Government of the People's Democratic Republic of Yemen invested \$100 million by 1979 to exploit the large sardinella resource confirmed by the survey. The Programme trained about 50

1 John Stoneman, Gt. UK Overseas Development Administration. *Telephone Interview*, London, May 30, 1984.

2. FAO, *The Indian Ocean Fishery Survey and Development Programme: Inter-regional; Project Findings and Recommendations Terminal Report*, FI:DP/INT/76/012 (Rome, 1980).

local technicians in the operation of a floating fish-meal factory and formulated a proposal for a national fisheries training institute in Yemen. An element of training existed in most activities of the IOP but special training projects were also undertaken. Two boat builders from Tanzania were trained in Sri Lanka in fibreglass boatbuilding in one of the many instances of technical cooperation between participating developing countries.

Eight states benefited from assistance in planning and designing fishery statistical systems – Indonesia, Madagascar, Mauritius, the People’s Democratic Republic of Yemen, Somalia, Sri Lanka, Tanzania and Gulf countries – but were constrained by inadequacies of staff and budget. The Programme also published two manuals in statistical methodology.

In later stages of the Programme, requests for assistance related increasingly to legislative and policy questions rather than technical matters, as few countries bordering the Indian Ocean were in a position to manage the extended zones of jurisdiction emerging from the Third UN Conference on the Law of the Sea. The IOP assisted Bangladesh, Kenya, Seychelles, Somalia, Sri Lanka, Tanzania, Zanzibar and Thailand with policy and legislative aspects of fisheries exploitation in the EEZs, as these extended economics zones of jurisdiction were called.

Unfortunately, only as the IOP progressed was it realised that technical assistance could be most effectively delivered on a sub-regional level. Neighbouring countries shared common stocks of fish and problems and therefore comprised natural management areas. Such areas existing in the Indian Ocean area include the south-west Indian Ocean, the Persian Gulf, the Gulf of Oman, the Bay of Bengal and the

North Arabian Sea. Several sub-regional fishery development and management units were therefore established to replace the Indian Ocean Programme. The Bay of Bengal Programme and Programme for the Red Sea and Aden Gulf are discussed in the following sections.

In total the IOP has been associated with the generation of additional technical assistance projects valued at \$76 million in addition to domestic funds in recipient countries. In addition, by 1979, nearly \$400 million was being invested as capital in marine fisheries in the region.¹

The countries bordering the Indian Ocean would continue to require assistance. The scarcity of trained manpower remained a constraint in the development of fisheries as did the lack of effective demand in some areas. Marketing of fish continued to meet cultural and religious constraints as well as objection to inadequate fish preservation. A similar programme to the IOP existed for the South China Sea Fisheries.

BAY OF BENGAL

In the Bay of Bengal region, five million people depended mainly on small-scale fisheries for a living, using traditional fishing methods. Concern for the poverty of these artisanal fisheries led to two UNDP funded projects to review existing programmes.² Following an IOP mission to the area sponsored by SIDA, FAO and SIDA agreed on a major development project to increase the food supply and improve living conditions of artisanal fishermen. The programme for "Development

1. FAO; *Changing Role for International Fisheries Organizations*, p. 4.

2. FAO, *The Indian Ocean Fishery Survey and Development Programme*, p. 33.

of Small-Scale Fisheries in the Bay of Bengal” (BOBP) funded by SIDA, became operational in 1979. It involved some 54 regional and national pilot projects in Bangladesh, India, Sri Lanka, Malaysia and Thailand.¹ Eight major project areas were involved: fishing gear and methods, fishing craft technology, coastal aquaculture, extension service, fish utilization, development and fisheries research and information services.

Some projects such as those involving the development of improved craft, gear and fishing methods have, with some exceptions, had a positive impact, even though attempts to improve the *kattumaram*, the traditional craft of the surf-beaten east coast of India, proved unsuccessful.² Coastal aquaculture projects have been started in all participating countries. Fish utilization projects such as fish drying and fresh fish handling were terminated because all had negative or no impact. An independent evaluation credited the programme with having made real and lasting contributions to the development of small-scale fisheries in the Bay of Bengal regions, with twenty-eight projects considered to have the potential of high impact in the longer time frame.³ The success of the programme has been attributed primarily to the exceptional skill of the director and exceptionally good information services. It could, however, not have succeeded without the enthusiastic support it received from governments and their cooperation with each other. It was furthermore only a small contribution in relation to the needs of the area.⁴

1. E.H. Nichols and L. Nyman, *Development of Small-Scale Fisheries in the Bay of Bengal: Report of the Impact Review Mission*, (Rome, FAO, 1982), p. 3.

2. Nichols and Nyman, *Development of Small-Scale Fisheries in the Bay of Bengal*, p. 10.

3. Nichols and Nyman, *Development of Small-Scale Fisheries in the Bay of Bengal*, p. 17.

4. Indian Ocean Fisheries Commission, *Report of the First Session of the Committee for the Development and Management of Fisheries in the Bay of Bengal, Colombo, Sri Lanka, 7-9 December 1981* (Rome, FAO, 1982), p. 5.

RED SEA

As a result of the IOP mission, which estimated that catches in the Red Sea and Gulf of Aden could be increased from an annual yield of 190,000 to 500,000 tons, countries bordering these areas became interested in exploiting these additional marine resources. A project aimed primarily at developing the small-scale and artisanal fisheries of Djibouti, Egypt, Jordan, the People's Democratic Republic of Yemen, Saudi Arabia, Sudan and the Yemen Arab Republic became operational in 1978 and operated in three phases until June 1985. The OPEC Fund for International Development had been co-financing the project together with the UNDP with FAO as the executing agency. The project enabled Egypt and other participating countries to engage in technical cooperation even in the absence of bilateral diplomatic relations. Egypt, in fact, functioned as the host government of the sub-regional project.¹

Assistance was being provided in almost all aspects of small-scale fisheries development; this has included institution building as the project identified lack of administrative infrastructure and professionals as a serious constraint to continuing fisheries development in the countries.

EEZ PROGRAMME

The changes in the Law of the Sea provided a framework in which the world's fish resources could be managed for the first time in history.² For over 300 years, since the days of Hugo Grotius, freedom of fishing was regarded as part of freedom

1. UNDP, *Development of Fisheries in Areas of the Red Sea and Gulf of Aden* ([Cairo] 1984), p. 9.
2. *The State of Food and Agriculture, 1980: World Review of Marine Fisheries in the New Era of National Jurisdiction*, FAO Agricultural Series, no.12 (Rome, FAO, 1981), pp. 85-129.

of the seas. Waters beyond the territorial sea limit of from three to twelve miles were regarded as common property and any country could fish in them. Under these conditions, attempts to manage and conserve fish stocks usually proved unsuccessful. At the international level, some important fish stocks were overexploited, while at the national level, many fishing industries were developed to overcapacity.

Over 100 states have claimed national jurisdiction over the resources found beyond twelve miles, with most of them establishing a 200 mile wide EEZ. Over 95 percent of the marine fish stocks currently exploited were found within these zones. Most coastal developing countries were in a position to benefit substantially from the new regime.¹ Management and development of fisheries was now based on national sovereignty and countries could promote the rational exploitation of these resources provided they developed their capabilities.²

Few, if any, developing coastal countries were in a position to assume their new responsibilities. Since many countries were not in a position to exploit their fisheries fully, joint ventures and other cooperative agreements with other nations were arranged. However, major beneficiaries of extended jurisdiction included such developed states as the United States and Canada.

Fisheries management was rendered complex by reason of numerous factors: fish stocks fluctuated during the year and over longer periods; one species might replace another, partially or entirely; and some fish ate each other (big fish ate little fish but large members of small species could eat the small or eggs of larger species).

Increased fuel prices also necessitated the introduction of energy saving techniques in

1. FAO, *The State of Food and Agriculture 1980*, p. 95.

2. Carroz, *World Fisheries Face Change and Challenges*, p. 18.

vessels, equipment and processing. Other considerations included employment, nutrition, maximizing foreign-exchange earnings and minimizing conflict between competing users of the resources. Hence, improved data, better information, new laws and strengthened institutions were necessary.

FAO estimated that about 5000 fisheries' managers needed to be trained and it has developed a training programme in a variety of subjects aimed at two target groups – senior administrators and experts from biologists to economists.¹ The training programme was part of FAO's 'Comprehensive Programme for the Development and Management of Fisheries in Exclusive Economic Zones' (EEZ Programme) established in 1979. FAO had been advising developing countries on EEZ matters as early as 1977 and the 1977 FAO Conference officially endorsed a special programme. Although FAO had provided some assistance through its Regular Programme and TCP, it was only in late 1978 that Norway provided \$3.6 million for the implementation of a major programme. With thirty years of experience in fisheries development in many countries, FAO was in a unique position to help developing countries.²

The EEZ Programme was being delivered in a decentralized manner through a network of FAO regional bodies designed to respond to the specific needs of groups of countries in natural management areas, or sub-regions. The bodies received technical support from FAO headquarters. They provided technical assistance to countries through locally-based teams of experts and short-term consultancies and by stimulating the use of local expertise and institutions. Regional fisheries bodies

1. FAO, Fisheries Dept., *A Strategy for Inter-Country Programmes of Assistance and Cooperation in Fishery Developments and Management* (Rome, 1980), p. 8.

2. Loftas, 'FAO's EEZ Programme', p. 234.

established by FAO advised on the execution of programmes of the technical assistance units and promoted cooperation in the management of shared stocks.

The EEZ Programme consisted of a medium sectoral plan to meet urgent needs and long term basic studies of fisheries management in exclusive economic zones. Countries required not only more information about fish stocks but also on the social and economic conditions under which fisheries development took place. With the reduction in international competition, countries could apply simpler management schemes and technologies better adapted to their local conditions. Regional cooperation was useful here.

The EEZ Programme embraced many of the activities of the FAO Fisheries Department. Numerous projects have been implemented.¹ Over 30 EEZ policy and planning missions had been undertaken by 1985. For instance, in Morocco the mission concluded that the Moroccan EEZ was being over fished and recommended that fishing should be reduced substantially in order to maximize economic benefits, and that Morocco increase its own participation in exploiting resources being fished by foreign fleets. During this time, the research vessel, *Dr. Fridtjof Nansen*, provided by Norway as part of its contribution to the Programme, conducted acoustic surveys of marine resources in the exclusive economic zones of Bangladesh, Burma, Sri Lanka, Malaysia, Thailand, Indonesia, Kenya, Mozambique, Djibouti, Egypt and in the Arabian Sea. A major project to provide information for tuna fisheries development in the EEZ of Indo-Pacific countries and the South-West Indian Ocean was established in Colombo, Sri Lanka.

1. FAO, *Report on the Programme of Assistance in the Development and Management of Fisheries in the Exclusive Economic Zones*, p. 4.

Legal advice was given to over 50 developing countries on the revision of fisheries law after extension of jurisdiction, and provided both by FAO headquarters and regionally. Regional cooperation is essential with respect to the harmonization of management and control measures and access conditions. FAO has helped in the formulation of national policies regarding joint ventures and access arrangements and in the formulation of actual agreements.

The requirement of common access conditions by states would help to secure the compliance of foreign fleets in that region. In April 1983, an expert consultation was held in Rome to consider guidelines, particularly for access conditions for fish stocks shared by more than one state.

In the early 1980s, hundreds of bilateral agreements were negotiated between coastal governments and long-distance fleets. Most agreements concluded were for short periods and represented only a transitional phase as countries developed their own physical and human resources.¹ Poor countries sometimes felt that their nationals should receive more training and that foreign vessels realized most of the benefits of their resources.

Studies in fisheries law formed part of long-term studies of the EEZ Programme. A series of regional compendia of fisheries legislation was being prepared and those for West Africa and the Western Pacific had already been published. Other long term studies undertaken by FAO included studies on strategies for fisheries development, especially with regard to small-scale fisheries, management of tropical inshore fisheries, management of stocks migrating between the EEZ and the high seas,

1. Jean Carroz, quoted in 'The New Regime for Fisheries', *Ceres*, No. 97, vol. 17, no.1, January-February 1984, p. 26.

territorial use rights in fisheries, conditions of access to fish resources in EEZ and the principles of fisheries management. Much of management theory was based on fisheries in temperate waters, while many small-scale tropical fisheries existed under very different conditions. Hence, the necessity arose of developing a new approach geared to tropical needs.

These basic studies, which were potentially useful to a wide range of countries and were often of a continuing nature, were frequently most appropriately conducted and distributed by an international organization. Such studies were usually published in several languages and thus reached the fisheries departments of all governments and many major fisheries institutions, even if not everyone who would find them useful had access to them.

FAO has taken the lead in helping nations bring about a new international order in fisheries.¹ As an international organization, FAO has played an important role as an 'honest broker' where issues of national sovereignty and distribution of wealth with regard to fisheries were concerned. The task was not easy. Even European nations adjusting to the new regime of the seas have experienced considerable difficulty in allocation and management of common stocks swimming through national waters.² There should be less confrontation as poor countries benefited from the resources off their coastlines, rather than watch foreign vessels harvest and deplete these resources. However, it remained to be seen whether countries could manage their resources sufficiently to make optimum utilization a reality.

1. Edouard Saouma, 'Statement by the Director-General' in FAO, *Report of the Fifteenth Session of the Committee on Fisheries, Eighty-fourth Session, Rome, 1-3 November, 1983* (Rome, 1983), p. 29.

2. FAO, *The State of Food and Agriculture 1980*, p. 34.

AQUACULTURE DEVELOPMENT AND COORDINATION PROGRAMME

Since the rate of increase of marine fish harvests has dropped, countries were increasingly depending upon aquaculture. Aquaculture, which provided 9 percent of world fish production in 1983, began increasing at a rate of more than 7 percent per year, including coastal aquaculture.¹ Furthermore, the potential for aquaculture has been enhanced. In order to assist countries with the development of aquaculture, the UNDP/FAO Aquaculture Development and Coordination Programme (ADCP) was initiated in 1977 after a planning phase culminating in the FAO Technical Conference on Aquaculture held in 1976 in Kyoto, Japan. This Conference adopted a strategy for global expansion of aquaculture through a series of regional networks. Since adequate financing was not available to establish new international institutions, existing institutions in developing countries undertook such activities as research, training and information exchange on a regional basis. Regional centres were linked to national centres and the UNDP provided most of the financial support while FAO was the executing agency. Other organizations, such as the Commonwealth Fund for Technical Cooperation and regional development banks have funded training.² These activities demonstrate again how FAO Conferences and meetings were designed to be related to action, rather than held in isolation.

In 1985, there were four centres in Asia, one in Africa one in Latin America and a centre planned in the Caribbean. Because of the large number of aqua farming systems in Asia and its expertise, there were four regional centres in the Asian

1. Richard A. Neal, 'Aquaculture Expansion and Environmental Considerations', *Mazingira*, vol. 8, no.3, July 1984, p. 24.

2. FAO, *Inter-Regional Network of Aquaculture Centres* (Rome, 1980-81), p. 2.

network, each concentrating on a selected number of farming systems. The centres were located in China, India, Thailand and Philippines.

At the Asian Pacific Regional Research Centre for Integrated Fish Farming in Wuxi, China, the focus was on integrating the traditional practice of carp culture with the raising of crops and livestock. The regional lead centre at the South-East Asian Fisheries Development Centre (SEAFDEC) in the Philippines decided to concentrate on technology development in coastal aquaculture, initially on shrimp culture. The UNDP/FAO contributed to the Asian centres by providing expertise to implement and coordinate their activities plus short-term consultants, some equipment and fellowships.¹

The ADCP emphasized small-scale aquaculture to benefit poor farmers and fishermen. The integration of crop-livestock-fish production increased household income. Most developing countries lacked essential inputs for fish culture such as feed and seed. A feed development programme was therefore started including a three-month training course in fish feed technology at the University of Washington, in addition to the establishment of national feed production and distribution systems.

Because fish did not breed naturally on fish farms, controlled breeding methods had to be developed. Such experiments were hampered by the lack of pituitary glands from appropriate fish. The Programme therefore established a 'pituitary bank' in Rome with donations from Hungary and India for giving glands to Third World countries for research. The core of the ADCP was, however, its multi-disciplinary team of specialists not available to donor agencies helping most countries with

1. UNDP/FAO, *NACA: Network of Aquaculture Centres in Asia* (Bangkok, 1981), p. 11.

aquaculture.¹ A computerized aquaculture information system was also being developed in the regional centres for dissemination of information on aquaculture from both developing and developed countries.

By 1981, the Programme had also identified and helped to formulate investment projects valued at about \$125 million. In 1980, for example, investment loans received by Indonesia from the Asian Development Bank (ADB) were associated with FAO studies for the development of marine fisheries and aquaculture in Sumatra. Similarly, loans to Nepal for fish hatchery infrastructure were related to FAO feasibility studies.²

Another interesting aspect of cooperation between countries in aquaculture was that 28 out of 57 aquaculture experts employed by FAO in 1983 were from ten Third World countries. These experts were usually financed by the donor developing countries because most countries requiring such assistance were not willing to give to aquaculture the necessary financial resources.³ It was this low level of financial commitment by governments that was a major constraint on the development of this sector within nations. Aquaculture was a promising sector for technical cooperation among developing countries because there were many experts especially in Asia.

The work of the Regular Programme has stressed disseminating knowledge of simple aquaculture systems, particularly those in Asia, which combine crops and livestock with fish farming.⁴ Four extension booklets on field experience in 'freshwater fish farming' were published by FAO and were translated into several

1. UNDP/FAO, *Aquaculture Development and Coordination Programme*, p. 5.

2. FAO, *Review of Field Programmes 1980-1981*, p. 24.

3. FAO, *Special Problems of Inland Fisheries and Aquaculture, Committee on Fisheries, Fifteenth Session, Rome, 10-19 October 1983* (Rome, 1983), p. 7.

4. FAO, *Review of the Regular Programme, 1982-83*.

local languages. In addition, one or two more advanced manuals were being produced each year on various kinds of fish or shellfish culture.

SMALL-SCALE FISHERIES

The term, small-scale fisheries, applied to fisheries restricted to providing a livelihood for artisanal fishermen and fish farmers. In acknowledging that FAO responded to governments and the fact that the need to focus developmental activity on small farmers and fishermen was not fully recognized until the early 1970s, it has to be said that FAO should have provided greater leadership in the sector of small-scale fisheries at least a decade earlier. The social needs and numbers of subsistence and artisanal fishermen have always greatly exceeded the number of industrial fishermen in developing countries. In the 1980s, some 90 percent of fisher folk were small-scale fishermen or fish farmers. These fishermen have been providing most of the fish utilized in these countries.¹ In fact, in its field projects in the 1950s, FAO had focused upon small-scale fisheries in training and strengthening of national institutions.² Traditional crafts were improved and mechanized and synthetic nets introduced. As financing from the UN Special Fund became available in the early 1960s, emphasis shifted to fisheries surveys, research and strengthening administrations for commercial stocks. Since 1970, every session of the Committee on Fisheries (COFI) has highlighted concern for poor fishermen and by the mid 1970s, small-scale fisheries had come to the fore again.

1. FAO, *FAO in 1977* (Rome, 1978), p. 32.

2. FAO, *Review of the Regular Programme 1980-1981*, p. 225.

Although the need for action had been recognized earlier, it was not until 1974 that an intensive programme of assistance to raise their standard of living and improve their working conditions was undertaken. A regional project for development of small-scale fisheries in Africa was then approved and in 1977 a programme was launched to improve the plight of subsistence fishermen in the Bay of Bengal (as discussed in the section on the Bay of Bengal Programme). Other missions and studies have led to projects in Mozambique, Indonesia, Malaysia, Congo, Sierra Leone and the Ivory Coast.¹

As of February 1981, about 30 percent in funds and field projects, 50 projects valued at \$33.1 million, were devoted to small-scale fisheries. Another 36 projects contained small-scale components.

Until 1977, training in fisheries had been geared to meeting the requirements of commercial fishing on the high seas and international agreements on world fish resources.² Three-quarters of the people trained in fisheries were technicians trained in such institutions as the Caribbean Fisheries Training and Development Institute in Trinidad, the Regional Training Centre in Kuwait or the Federal Fisheries School in Nigeria. Only 20 percent were at the vocational levels such as extension workers and fishermen receiving practical instruction in aquaculture and fishing methods, while a mere 5 percent were trained at the professional level and those at workshops and seminars.

An expert group meeting on small-scale fisheries convened by FAO in September 1975, produced guidelines for planning and implementation of small-scale fisheries,

1. FAO, *World Fisheries and the Law of the Sea: the FAO EEZ Programme* (Rome, 1981), p. 34.
2. FAO, *Review of Field Programmes, 1976-1977*, p. 36.

stressing community participation. In the 1980s, steps were taken to rectify what had been the major weaknesses of earlier FAO small-scale fisheries projects.¹

Technologies had been introduced without adequate consideration of the cultural conditions and financial constraints of communities. Expensive foreign professionals were retained for long periods when it would have been more appropriate for local technicians to take over implementation after initial guidance and inspiration from experts. UN agencies had distinct difficulties in reaching people at the 'grass roots level' and therefore usually had to be satisfied with training of the trainers.

Short-term consultants were increasingly being used, often from within the region. This also resulted in more appropriate tropical methods being transferred as opposed to temperate zone techniques.² This change might, in part, be interpreted as a solution to a problem as UNDP funds were decreasing while technical and professional expertise in developing countries increased and was available at lower cost.

With the higher fuel prices of the 1970s, some large vessels increasingly fished closer to the shores, providing competition for the artisanal fishermen. These traditional marine fishermen also found it hard to compete in price, quality and processing with industrial fisheries. As a result, an estimated 20 to 30 million fisher folk were in danger of becoming increasingly impoverished. There were, furthermore, impoverished fishermen engaged in rural aquaculture and inland fisheries on whom data were not available.³ The FAO World Conference on Fisheries Management and

1. FAO, *Review of the Regular Programme 1980-1981*, p. 230.

2. FAO, *Report on the Programme of Assistance in the Development and Management of Fisheries in the Exclusive Economic Zones*, pp. 3-5.

3. FAO, *Review of the Regular Programme, 1980-1981*, p. 224.

Development consequently approved a programme of action for small-scale fisheries development.

NUTRITION AND FISHERIES

Concern for small-scale fishery development was only one aspect of fisheries and nutrition. Although the ability of fish to help feed the malnourished has been recognized since the Hot Springs Conference, very little action in this regard seems to have been taken until the late 1970s by FAO and other international organizations. An International Conference on Fish in Nutrition was convened by FAO in 1961.¹ From time to time, delegates had stressed its importance and FAO has been concerned with handling and processing of fish.²

From a nutritional viewpoint, fish was comparable to meat and dairy products, sometimes called 'the poor man's meat'. Per capita, consumption of fish has unfortunately increased in countries that can afford to pay to a much greater extent than in developing countries. The poor, who need food most, could not afford marketed fish. Fisheries provided employment and income for the poor as well as nourishment. The nutritional considerations in terms of policy were who benefited from exploitation and who had access to fish products. Policies arranging for the poorest to benefit varied from country to country. In April 1979, the Committee on Agriculture emphasized that fisheries development and training projects should be reviewed for their likely impact on nutrition, according to evaluation methods

1. United States. *Official Report of the United States Delegation to the Eleventh Session of the FAO Conference, Rome, Oct. 30-November 24, 1961* (Washington, D.C., 1961), p. 51.

2. FAO, *Report of the Thirteenth Session of the Conference, 20 Nov. – 9 Dec. 1965* (Rome, 1966), p. 51.

developed especially for fisheries. In 1978, FAO also initiated an assistance programme for the least developed countries to assist them in extending their fisheries production.¹

In the past, action has also been undertaken by FAO with regard to losses. In 1977, nine cooperative programmes to reduce losses had been initiated in Asia and the Far East. During 1978-1979, two trust fund projects financed by Norway and Sweden to develop methods for handling and processing small pelagic fish to produce inexpensive products for the poor became operational. Also coordinated by the Regular Programme was a research and development programme for reduction of waste and spoilage involving 20 fish technology institutes mainly in developing countries.²

The FAO World Fisheries Conference in 1984 approved a Programme to reduce wastage and ensure that fishery resources were utilized to benefit the poorest. Discards at sea in trawl fisheries have been estimated to be as high as 4 to 5 million tons. Loss of fish during processing and distribution, particularly dried fish eaten by insects in the tropics, was estimated to be an equivalent of 3 to 4 million tons. Handling and processing were improved to reduce such loss. Marketing of new low cost products from underutilized species and catch by-products were to be promoted.³ FAO has undertaken studies of krill, an under-exploited resource in the Antarctic.⁴

1. *United States Participation in the UN: Report by the President to the Congress for the Year 1978* (Washington, D.C., U.S.G.P.O., 1979), p. 167.

2. FAO, *Review of the Regular Programme 1980-81*, pp. 41-42.

3. J. Carroz, 'Achievement of the FAO World Conference on Fisheries Management and Development', *Mazingira*, 1984.

4. *United States Participation in the UN: Report by the President to the Congress for the Year 1978*, p. 167.

TRAINING

Training, as in other fields, has been one of FAO's main activities in fisheries. FAO's extensive training activities were noted above in discussion of its programmes. Training has been an integral part of all field projects. It was also provided by formal courses and work experience at FAO headquarters. As an intergovernmental agency, FAO has been able to recruit both trainees and instructors from most nations. This has contributed to both cost-effectiveness and more appropriate skills as, for example, with regard to skills in aquaculture, where simple Asian technology is often transferred. Initially, one of the great obstacles to fisheries development was the lack of adequate education and training facilities. In view of this problem, FAO convened in November 1972 an Expert Consultation on Fishery Education and Training.¹ It has also initiated facilities. The establishment of a training centre in the Republic of Korea, the Deep-Sea Fishing Training Centre in Pusan, has been a major achievement.² The Centre was established when the country had just started the rapid expansion of distant water fishing for tuna and trained about 500 navigators and marine engineers for the industry. In 1985, it accommodated over 500 students at a time and offered 6 to 8 months' intensive training courses in fishing techniques, navigation and marine engines to graduates of fishery colleges and high schools and to fishermen.³

For the Near East region, a sub-regional training centre was established in Kuwait under the auspices of FAO with subjects for those engaged in vessel operation and

1. *United States Participation in the UN: Report by the President to the Congress for the Year 1972*, Publication 8731, Dept. of State (Washington, D.C., U.S.G.P.O., 1973), p. 135.

2. Roy Jackson, First Assistant Director-General of the FAO Fisheries Dept., *Personal Correspondence*, March 21, 1983.

3. FAO, *Fighting World Hunger* (Rome, 198-), p. 41.

extension workers. By 1975, Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates had contributed \$2.3 million to the Centre.¹ The first group of 29 students graduated as skippers, mates, engineers and extension workers in 1978.²

INVESTMENT

By 1965, it had become evident that a major obstacle to the development of the fishing industry potential was the lack of capital investment from both domestic and foreign sources. In 1969, FAO therefore provided leadership by convening the first International Conference on Investment in Fisheries in which representatives of industry and banking participated as well as governments.³ The FAO has helped to channel both public and private investment to fisheries.⁴ It conducted international fishery surveys and feasibility studies to identify investment possibilities and drew them to the attention of investors as demonstrated by the examples in the sections on aquaculture and the Red Sea. The fishing industry in the United States, the EEC and other industrialized countries has benefited as the efforts of the FAO provided them with opportunities to invest capital.⁵ FAO identified where investment would yield results and developed countries took over. The main concern of FAO was a sound project.

1. *FAO in 1975* (Rome, 1976), p. 41.

2. *FAO in 1978* (Rome, 1979), p. 39.

3. *Report of the Food and Agriculture Organization of the United Nations to the Economic and Social Council at its Forty-Ninth Session* (Rome, FAO, 1970), p. 5.

4. Martin Kriesberg, *International Organizations and Agricultural Development, Foreign Agricultural Economic Report 131*, rev. edn. 1981 (Washington, D.C. U.S.D.A., 1981), p. 52.

5. United States, *United States Objectives in FAO* (Washington, D.C., June 22, 1970).

The Regular Programme has provided technical expertise for the identification and preparation of investment projects primarily through missions on behalf of, or in participation with, the FAO Investment Centre, the World Bank, regional banks, and other development agencies. Estimation of the actual investment generated with the assistance of the FAO Programme is difficult because it does not participate in the finalization of the feasibility studies and follow-up action. A conservative estimate of investment arising directly from FAO activities in 1978-79 was in the order of \$300 million.¹ About one-third of this amount was utilized for construction of harbours and shore facilities in ten countries. The remainder financed the development of shrimp industries, offshore fleets, vessel construction and mechanization in a dozen countries. During the same period, FAO helped to promote investment through joint venture agreements in Sri Lanka, the Seychelles, the Philippines and Papua New Guinea.

FAO has stimulated both foreign and domestic investment. In Brazil, when a large fisheries project became operational in 1967, a law was introduced to provide incentives for stimulating investments in all aspects of fisheries. During the first three years of a five-year project, over \$300 million was invested in, or committed to, the industry, spurred by the efforts of FAO and the UNDP.² Reviews of fisheries investment projects during the 1970s revealed several weaknesses.³ Investment opportunities are sometimes overlooked or projects have not been soundly based when implemented. A lack of coordination between agencies, donors and financing

1. FAO, *Review of the Regular Programme 1978-79*, p. 41.

2. FAO, *Review of Field Programmes 1972-73* (Rome, 1973), p. 97.

3. FAO, *Report of the FAO World Conference on Fisheries Management and Development, Rome, 27 June – 6 July, 1984* (Rome, 1984), p. 24.

institutions concerned with fisheries development has been a contributing factor to these failures. The creation of EEZs created a further set of investment opportunities. The Inter-American Development Bank has given priority to small-scale fisheries development and so have the World Bank, the Asian Development Bank and the African Development Bank.

MARKETING

It was realized that a major constraint with regard to fisheries was the need to improve markets and distribution. Fishermen often experienced difficulty in disposing of their catch, selling it only near landings and large cities. Unfamiliar species must also be made available in familiar product forms. FAO has, therefore, undertaken both national marketing projects and regional fish marketing services. INFOPESCA, the Marketing Information Service for Latin American Fish Products, in Panama City begun in 1977, provided importers and exporters with the latest information on market demand and types of Latin American fish available. In 1978, it was instrumental in opening up new export markets for 90,000 metric tons of fish and fish products valued at \$60 million annually.¹ In 1981, the marketing information service was estimated to be assisting with nearly one quarter of fish exports from the Latin American region. Market information necessary to complete a deal such as import and export duties was also made available. Because of market development by INFOPESCA, Malaysia imported canned sardines and industrialized countries imported hake from Latin America. It was also demonstrated that a large South American sardine could be substituted for herring. In 1981, with funds from Norway,

1. FAO, *Review of the Regular Programme 1978-79*, p. 42.

FAO established INFOFISH,¹ a computerized marketing service for 20 countries in Asia and the Pacific. An expert from INFOPECSA worked on the staff of INFOFISH. When INFOSAMAK, the service for the Arab World and INFOPECHE for West Africa, began operating, developing countries had a network to find markets for their fish. However, there was doubt about whether they would work as well as the Latin American service. Experience has shown that these common services were cheaper than separate national arrangements but may require considerable investment.² Formal government agreements were usually few.

In 1981, FAO had developed a fully computerized fishery statistical database (FISHDAB). This system brought together major collections of statistics of fish catches and landings of domestic production of fishery commodities and trade on such commodities. The data collected were disseminated to member countries through the *Yearbooks of Fishery Statistics* and by direct accession to data resident in the host computer. The database provided information by country or statistical area and by species for a time series that went back to 1970.

The Organization has also introduced a new information source, a computerized fish market indicator system, GLOBEFISH, designed to provide up-to-date information on the factors influencing the market for the most important fishery commodities and to identify medium-term (3-6 months) international trade development trends for these commodities. The database resident on a host computer was directly accessible by the users. Periodic reports extracted from the database

1. FAO, *INFOFISH Marketing Digest*, no.2, March-April, 1985.

2. FAO, *International Collaboration in Research, Management and Development Including the Role of FAO*, pp. 2-6.

were made available to member governments as well as to the user community as a whole.

Developing countries often lacked the necessary information on import restrictions to arrange the export of fish. With financial assistance from Norway, a global *Register of Import Regulations on Fish and Fishery Products* was published in 1980, which has since been regularly updated.¹ Advice to export industries in developing nations on quality standards, hygiene and plant lay-out has been aimed at improving international market possibilities.²

INFORMATION RESOURCES

Another unique feature of FAO's work relating to fisheries resources was its statistics and information resources on all aspects of fisheries in most countries.³ Although these had been collected since the beginning of FAO from respective programmes in units, in 1966 the Fishery Intelligence and Reports Unit was set up in the Office of the Assistant Director-General to compile information on countries. Technological information on fishing vessels, processing, etc. was disseminated in the quarterly journal *World Fisheries Abstracts*, while biology and other scientific interests were served by the *Current Bibliography for Aquatic Sciences and Fisheries*. This service was amalgamated in 1971 with *Aquatic Biology Abstracts* to form *Aquatic Sciences and Fisheries Abstracts (ASFA)*. *ASFA*, published monthly since 1971, was compiled by FAO from input provided by fisheries institutions in

1. FAO, Review of the Regular Programme 1980-81, p. 60.

2. FAO in 1981, (Rome, 1982), p. 41.

3. FAO, Report of the FAO World Conference on Fisheries Management and Development, Rome, 27 June to 6 July 1984 (Rome, 1984), p. 5.

Hamburg, Biarritz, Brest, Ottawa, London, Moscow and Washington.¹ In 1978 *ASFA* became available on magnetic tape.

It was at this time that FAO statistical information functions were combined to form the *Fishery Information Data and Statistics Service* and a computerized information service called *Aquatic Sciences Fisheries Information and Systems (ASFIS)* was formed. All countries utilized *ASFIS* compiled jointly by FAO, the UN Department of Economic and Social Affairs and the IOC and other international and national agencies for aquatic sciences and fisheries. In addition to the industrialized countries, assistance has been given to selected developing countries, initially Mexico and Portugal to strengthen their institutional base to enable them to become the focal point for channelling of technical information to their regions. A regional centre was also being planned in Thailand in cooperation with the South-East Asian Fisheries Development Centre (SEAFDEC). Various Asian languages were then included in the system. *ASFIS* provides two monthly periodicals reproducing the tables of contents of pertinent journals in the respective fields: *Freshwater and Aquaculture Contents Tables* and *Marine Science Contents Tables*.

Assistance for institution-building for information and data handling was also given to other developing countries through a training course in Latin America. Countries have been encouraged to collect, compile and disseminate statistics and information, both for their own decision-making and for availability to the global

1. Kriesberg, *International Organizations and Agricultural Development*, p. 165.

community. Fishery country profiles have been issued by FAO as individual country papers and regularly updated since 1972.¹

FAO has compiled and standardized a great deal of information on a regular basis. The *Fisheries Statistics Yearbook* has been available since 1957. It has been available since 1963 as two annuals: The *FAO Yearbook of Fishery Statistics: Catches and Landings* and the *FAO Yearbook of Fishery Statistics: Fishery Commodities*. As noted above, this was useful marketing information.

The *Review of the State of World Fishery Resources* presented to FAO's Committee on Fisheries was widely circulated. It featured a summary of the state of the stocks in all major marine areas and inland fisheries and was issued by the Marine Resources Division. Issued from 1968-1977, FAO's quarterly *Aquaculture Bulletin* had facilitated rapid exchange of information and the coordination of research programmes for aquaculture.

FAO publications, whether periodically issued or individual reports, have provided administrators and scholars with invaluable information available at FAO and through the UN publication sales agents even in the case of developed countries. FAO documents *List of Publications and Documents, 1948-1978* and the *Supplement 1: 1979-1984* indicated what documents FAO Fisheries Department has published including those of regional commissions.

FAO also has produced numerous manuals. For example, new manuals prepared in 1973 included topics such as net mending and outer board design and performance, and in 1980-81, several manuals were prepared on stock assessments, methods for

1. FAO, Fisheries Dept., List of Publications and Documents, 1948-1978, FAO Fisheries Circular No. 100, rev. 3, FIDI/C100 rev.3 (Rome, 1979). Supplement 1: 1977-1984.

tropical fish stock design of acoustic resource surveys and evaluation of shrimp resources.¹

TREATIES AND MEETINGS

FAO has cooperated with other organizations in the drafting of international treaties on conservation of fishery resources. The International Convention for the Conservation of Atlantic Tuna and an International Convention establishing the International Commission for the Southeast Atlantic Fisheries were two examples.² With advice from the European Inland Fisheries Advisory Commission, FAO drafted with the IOE a convention to control the spread of main communicable fish diseases through international transfer of fish and fish eggs for aquaculture.³ It has also participated in other regulatory functions such as developing a code of safe practice for fishermen. The FAO/WHO Codex Alimentarius Commission (discussed in Chapter 6) produced codes for fish and fish products.

The usefulness to all participating countries of the numerous international technical conferences, meetings and workshops arranged by FAO over the years could not be precisely measured. The FAO World Conference on Fisheries Management and Development held in Rome in June-July, 1984 at the Ministerial level was, however, historic in its scope.⁴ It was the first time all nations had gathered to confront the challenges posed by fisheries problems and potentials as a source of

1. FAO, *Review of the Regular Programme 1980-81*, p. 58.

2. FAO, *Report of the Food and Agriculture Organization of the United Nations to the Economic and Social Council at its Forty-Ninth Session*, p. 5.

3. United States, *U.S. Participation in the U.N.: Report by the President to the Congress for the Year 1974*, Dept. of State Publication 8827 (Washington, D.C., U.S.G.P.O., 1975), p. 296.

4. Carroz, 'Achievements of the FAO World Conference on Fisheries Management and Development', *Mazingira*, 1984.

food, employment and income. Global ad hoc conferences invariably resulted in 'stocktaking' and increased awareness by governments, agencies and other concerned organizations. A detailed review of key issues was undertaken. The Conference adopted a strategy for fisheries management and development. The five associated programmes of action endorsed involved trade, aquaculture, small-scale fisheries, alleviating under-nutrition and planning and management of fisheries generally. The degree of impetus the Conference provided cannot be measured. It was time countries accustomed to allocating their resources to agriculture and industry became aware of the value of fisheries both to their economies and the feeding of malnourished people.

MARINE POLLUTION

Regional arrangements for marine pollution control have been developed mainly within the framework of the United Nations system. In 1968, international cooperation among the agencies had been secured by the formation of the IMCO/FAO/UNESCO/WHO/WMO/IAEA/UN Joint Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP), established by the FAO Council at its 51st session.

FAO was, however, one of the first organizations to provide leadership to safeguard marine resources against pollution by organizing the FAO Technical Conference on Marine Pollution and its Effects on Living Resources and Fishing convened in Rome in 1970 to develop solutions.¹

1. United States, U.S. Participation in the U.N.: Report by the President to Congress for the Year 1970, Dept. of State Publication 860, p. 135.

The GFCM, a regional fisheries commission of FAO, prepared a study on the state of pollution in the Mediterranean and submitted it to this Conference.¹ The Conference called for a regional approach to marine pollution control in enclosed and semi-enclosed seas. The GFCM then took the initiative that resulted in the eventual adoption of comprehensive arrangements for the protection of all resources against pollution in the Mediterranean.² During an intergovernmental consultation of concerned governments held in Rome in February and May 1974, FAO presented the Principles for a draft convention to protect fisheries and other living resources. The Consultation adopted a set of guidelines for the formulation of a Convention to include the protection not only of living resources but all uses of the marine environment. With this comprehensive scope, there was little support for the GFCM carrying out secretariat functions. Governments preferred not to entrust fisheries bodies with responsibilities for pollution control as it introduced other actors and interfered with technical fishery operations.³ The Governing Council of UNEP at its second session in 1974 decided to support the preparation of conventions to protect the Mediterranean and other seas from pollution. UNEP was therefore given secretariat responsibilities for the Convention for the Protection of the Mediterranean Sea against Pollution opened for signature by a Conference convened by UNEP in Barcelona, February, 1976.⁴ An action plan for the Mediterranean was adopted by governments in 1975. Action plans have since been implemented by UNEP in the

1. Dominique Alhéritière, 'Marine Pollution Control Regulation: Regional Approaches', *Marine Policy*, vol. 6, no.3, July 1982, p. 164.

2. Jean Carroz, 'Institutional Aspects of Resources Management and Protection in the Mediterranean', *Ocean Management*, vol. 3, 1978, p. 243.

3. Gerald Moore, 'Legal Aspects of Marine Pollution Control' in R. Johnson, ed., *Marine Pollution*, (London, Academic Press, 1976), p. 667.

4. Carroz, 'Institutional Aspects of Resources Management and Protection in the Mediterranean', p. 245.

Caribbean and the East Asian Seas, the South-east Pacific, West and Central Africa, the East Africa Region and the Kuwait Action Plan Region as part of its Worldwide Regional Seas Programme.¹ This Programme involved not only cooperation with regional governments concerned but also other United Nations agencies such as FAO, IMO, UNESCO, WHO and WMO. An FAO initiative, therefore, perhaps more by default than design, resulted in a comprehensive programme for marine pollution. This was yet another example of FAO's catalytic role in stimulating cooperation among agencies and governments. The seas worldwide were common property and their preservation involved cooperation of states whose relations may be hostile such as Israel and Tunisia and Libya in the case of the Mediterranean.² A supranational organization could arrange such cooperation. One might ask, however, if it was right to model all the regional sea programmes on the Mediterranean Programme, which was largely European.

FURTHER CONSIDERATIONS

While the foregoing sections have provided selective insight into the role of FAO and some of its tangible achievements, a further appreciation of its contribution can be realized from considering the sheer number of its projects. In 1969, the Dept. of

1. UNEP, *Review of Major Achievements in the Implementation of the Action Plan for the Human Environment: Report of the Executive Director, Governing Council, Tenth Session, Nairobi, 20 May – 2 June 1982*, UNEP/GC.10.INF.1, (Nairobi, 1982), p. 13.
 2. UNEP, *Report of the Second Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea Against Pollution and the Related Protocols and Intergovernmental Review Meeting of Mediterranean Coastal States of the Action Plan, Cannes, 2-7 March, 1981* (Nairobi, 1981), p.12-13; Annex pp. 1-15.

Fisheries was responsible for some 86 UNDP, 12 FFHC and 2 WFP projects, serviced by some 300 international experts.¹

As more countries became interested in utilizing the fishery resources off their coasts, FAO carried out more fishing projects for UNDP and other donors. By 1981, there were 241 operational projects with a staff of 260 field experts and funds from various sources totalling \$145 million.²

Although many of these projects did not result in follow-up by governments or made contributions that cannot be traced, concrete achievements can be identified. In addition to those already discussed, FAO work in Sri Lanka and Peru was mentioned here to illustrate the catalytic role FAO has played in furthering fisheries development in many countries.

In Sri Lanka, FAO revolutionized the fishing industry by equipping traditional log crafts with outboard engines and by installing inboard engines in other suitable craft.³ By 1965, 1500 of Sri Lanka's traditional craft had been fitted with outboard motors and about 800 inboard powered boats, designed primarily by FAO experts, had been built to harvest the sea. The success of this project resulted in 750 engines being donated by private companies under the FFHC by 1965 in five other countries.

Three projects in Peru operated by FAO for the UNDP during the 1960s assisted in the establishment of an institute for marine resources as well as assisting the government in providing the infrastructure and organization for the capture,

1. FAO, *Report of the Food and Agriculture Organization of the United Nations to the Economic and Social Council at its Forty-Ninth Session*, p. 13.

2. Phillips, Ralph, *FAO: its Origins, Formation and Evolution 1945-81*, (Rome, 1981), p. 140.

3. FAO, *FAO in the Field* (Rome, 1965), pp. 60-64.

processing and marketing of fish nationally and for export.¹ Management of the Peruvian anchoveta have received particular emphasis, as well as an attempt at understanding its dynamics. Unfortunately, for unknown reasons, the industry collapsed in 1972 and in spite of a partial recovery in the mid-1970s, the 1983 anchoveta haul was the lowest in two decades.² Meanwhile, sardine stocks off the coasts of Chile and Japan grew dramatically over the ten year period 1975-1985.³ This example was a good illustration of just how difficult it was to fathom a maximum sustainable yield in fisheries.

CONCLUSION

As the lead United Nations agency for fisheries, FAO is the hub about which international activity in fisheries revolved. Over many years, it has been providing development assistance and guidance to its member nations. As a multilateral agency it had unique access to information and has been systematically compiling this information over the years and disseminating it in member nations. Supported by these information sources, FAO experts advised and provided technical assistance to developing countries on all aspects of fisheries. The skills of its multi-disciplinary experts with a permanent staff of over 100 professionals at headquarters were not available to other donors. Neither could bilateral donors pay, for example, for an expert in aquaculture from Bangladesh or Sri Lanka to work in Africa. Although there was some duplication of activity with bilateral donors, FAO was usually perceived as

1. FAO, *Review of Field Programmes, 1972-73*, pp. 96-97.

2. 'The New Regime for Fisheries: Prospects, Policies, Practices' *Ceres*, No. 97, vol.17, no.1, p.29.

3. *Report on the Programme of Assistance in the Development and Management of Fisheries in the Exclusive Economic Zones*, p. 6.

being impartial and objective. Impartial advice to countries was particularly important with regard to equipment, joint ventures and investment and shared stocks.

Inadequate information with regard to fish stocks had, at times, led to wasted investment capital and over-fishing.

Unfortunately, during the 1960s and early 1970s, FAO efforts with regard to investment, training and research were focused on commercial fisheries to the neglect of small-scale fisheries, which provided most of the fisheries for food and employment in developing countries. As growth of marine fishery resources declined, the importance of small-scale fisheries and aquaculture was recognized. It was also at this time that the poor, as a target group, had become fashionable in development circles. Like other development agencies, FAO tended to reflect development trends as well as provide leadership in determining trends.

Among its most significant activities has been FAO's attempt to manage fishing in international waters through the regional fishery commissions established under its auspices. Because governments did not allow it the necessary authority and finances, FAO's efforts to rationalize fishing often met with limited success.

Now that most fishing occurred within national boundaries, FAO, through its EEZ Programme, assisted countries to develop the expertise to exploit their fish stocks rationally. Migratory stocks, however, continued to require international management.

Through its Committee on Fisheries, FAO coordinated the fisheries activities of all nations, regional commissions and other institutions. As a UN agency, FAO always coordinated regionally with a view to global coordination. Regional

arrangements outside of the UN usually do not have this global perspective. Inter-regional arrangements and coordination were necessary with regard to such activities as technical assistance, information services, marketing and investment. Most coordination, however, occurs at the regional and sub-regional levels in developing countries. As an impartial supranational agency, FAO was in a position to arrange cooperation involving states which did not have diplomatic relations or were otherwise in conflict.

What was seldom realized was the extent to which developed nations have benefited from FAO's work. It was the developed countries which, until the new regime of the ocean, were harvesting much of the fish FAO was trying to conserve in the seas off the coasts of developing countries. Such activities as resource identification for investment, statistical and other information have been useful to developed countries. It is FAO's work in marine resources and pollution that has been of most immediate interest to Canada, in the 1970s the world's largest exporter of fish.¹ Japan remained the world's largest importer and consumer of fish, in spite of being the world's largest fishing nation.

It was, however, difficult to attribute any accomplishment entirely to FAO, as without the cooperation of member governments and other agencies and organizations, FAO could not operate. In the process of international cooperation, they stimulated each other.

1. Canada, Dept. of Agriculture, *Canada and FAO*, Publication No. 1453, (Ottawa, 1971)

CHAPTER 9

CONCLUSION

As a result of the common view during the 1970s and 1980s that FAO was too bureaucratic to be effective, its work was underestimated. The central argument of the thesis was that the bureaucratic nature of FAO was not excessive and did not prevent it from achieving its objective. An examination of its functions – information, a forum and technical assistance – supported this argument. It proved FAO's contributions to food and agriculture, fisheries and forestry have been substantive and at times substantial, benefiting developed as well as developing countries.

As the world's most comprehensive information center for food and agriculture, FAO has made a valuable contribution to all its member states, in collecting, analyzing, interpreting and disseminating information with regard to food and agriculture, fisheries and forestry. As an intergovernmental institution with special relationships to governments, it had access to information which other countries did not individually have.

The foremost benefit that industrialized countries obtained from participation in FAO was the fora. Through them developed nations gained a great deal of useful information, developed better understanding or agreement with other countries on problems of common concern and contributed to improved international relations generally. Developing countries could obtain these benefits as well as an enhancement of their technology. Intergovernmental meetings were able to facilitate technical and economic cooperation in agriculture between countries which did not

have diplomatic or good relations. Improved relations could result from interaction on such fora, particularly when senior governmental officials met.

The research revealed that both recipients and FAO concurred that for developing countries technical assistance was the most important function. The total number of projects increased from 1300 in 1970 to about 2600 in 1987. Training was the most important aspect of FAO projects. In 1983, approximately 75,000 people benefited by training activities of FAO, excluding fellowships and study tours.

Although the impact of FAO projects was difficult to measure, the large number of projects indicated their contribution was considerable. Selected success stories were however known; in India all projects had done some good.

Due to FAO experts who trained local Thais in food quality from 1984, Thailand's food exports increased from U.S. \$2,500 million in 1985 to U.S. \$4,800 million in 1989, contributing significantly to Thailand's 10 percent economic growth rate in that period. Earlier Thai food exports had been rejected by international markets. FAO also assisted other countries in adopting these Codex Alimentarius standards. In Western countries, the Codex had become the main reference for food trade.

The developed countries also gained from FAO's control of pests and plant diseases just as from control of animal diseases. They also benefited by its regular monitoring of the world food situation and long-range studies of the future of agricultural development. Other important work was the study of tropical forestry, the Soil Map of the World and on genetic resources. It was the developed countries that

used FAO statistics most, especially in fisheries. FAO needed improved public relations to create awareness of its achievements.

FAO AND PUBLIC RELATIONS

Director-General Edouard Saouma began his relationship with the media on a positive note. Early in his administration in 1976, he gave a luncheon and press briefing, which resulted in more positive media coverage of FAO. But when a few weeks later they sought more interviews, Saouma considered he had done sufficient for the media, so some journalists began criticizing FAO.¹ Criticism became more strident and culminated in a media campaign against Saouma and FAO during his second re-election campaign in 1987.

The negative press or failure of media attention was partly the fault of the FAO Information Division. Even in Italy FAO had a low profile in the press and on TV, partly linked to the Italian public's cynical attitude to government in general. The *Daily American* newspaper published in Rome featured frequent negative articles on FAO in the 1980s. An article in *The Times*² summarized a *Daily American* attack on FAO and FAO's defence. After the newspaper published a 15-page *FAO Dossier* consisting of critical articles in December 1982, the Director of the FAO Information Division replied in a long letter. 'FAO has faults. But it is at best an attempt to improve the lot of vast numbers of poor and hungry people in the world. He described the accusations as malicious and unfair.'

1. Ralph Phillips, Deputy Director-General of FAO 1978-1981, *Interview*, Washington, D.C., July 1982.

2. Peter Nichols, 'UN Body Rejects Charges of Arrogance and Failure', *The Times*, January 18, 1983.

More serious damage to FAO's reputation by the press was inflicted by Otto Matzke, a retired employee of the WFP, in a series of articles in the influential Swiss newspaper *Neue Zürcher Zeitung*.

The FAO Information Division seemed to have been inadequate in its contact with the Western media, but it also covered the WFP until 1984, which enjoyed a good reputation and good press relations. But FAO was a more complex organization and fewer people were interested in agriculture, than, for example, health (WHO), in children (UNICEF) or in food aid to the starving (WFP).

The International Fund for Agricultural Development was established with a good reputation, because it helps the poorest people in the poorest countries¹ and despite the fact that most of its staff were former FAO personnel. Moreover, FAO designed IFAD projects. There was, however, something of a belief that 'small is beautiful' and FAO was the largest of the UN specialized agencies.²

In 1982, the first time FAO press clippings were analysed, over 8000 articles had appeared, but most were in local and regional papers, rather than in the national press, especially in developed countries.³ A large proportion of FAO press releases was getting limited or no response and television interviews and programmes on FAO were similarly lacking.

FAO has had good relations with the British media, having given the A.H.

Boerma Award for Journalism to *Farming World*, a programme of the BBC World

1. A.A. Attiga et al, *The Challenge of Rural Poverty: the Role of IFAD* (Rome, IFAD, 1994).

2. Douglas Williams, *The Specialized Agencies and the United Nations: The System in Crisis* (New York, St. Martin's Press, 1987), p. 254. Comptroller General of the United States, *The United States Should Play a Greater Role in the Food and Agriculture Organization of the United Nations: Report to the Senate Committee on Governmental Affairs* (Washington, D.C., 1977), p. 1.

3. FAO, *Review of the Regular Programme 1982-83* (Rome, 1983), p. 106.

Service in 1983; several articles on FAO have in particular appeared in the *Financial Times* and the *Economist*; some programmes on FAO have been broadcast on BBC TV.

Beginning in 1983, the *FAO World Food Report* was published to report on the food and agriculture situation. It was aimed at the media, NGOs and individuals organizing support for agriculture and rural development and available in all five FAO languages. The initial circulation was 52,500 copies.¹ The yearly publication *FAO in...* was incorporated in the World Food Report. *CERES*, an FAO bimonthly publication dealing with agricultural development contained a section summarizing significant FAO field projects.

Established in 1979, World Food Day has been a useful instrument for FAO's publicity, but not always exploited to its fullest extent. It has been celebrated around the world by governments on 16 October, the day FAO was founded. Its purpose has been to spread awareness regarding hunger and involve people as well as governments in its eradication.

A possible criticism of FAO's public relations was that FAO staff did not attend enough academic conferences or publish enough papers in international scientific journals. Nor did such journals review many FAO publications. Some should have been reviewed in academic journals, which would have significantly enhanced FAO's academic reputation. No independent academic analyses of FAO's work appeared to have been conducted.

But the internet has assisted FAO in the past two decades. Because it operated on moral rather than political authority, its image was of importance.

1. FAO, *Review of the Regular Programme 1982-83*, p. 107.

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APPENDIX A

FUNCTIONS OF THE FOOD AND AGRICULTURE ORGANIZATION

1. The Organization shall collect, analyse, interpret and disseminate information relating to nutrition, food and agriculture. In this Constitution, the term “agriculture” and its derivatives include fisheries, marine products, forestry and primary forestry products.
2. The Organization shall promote and, where appropriate, shall recommend national and international action with respect to:
 - (a) scientific, technological, social and economic research relating to nutrition, food and agriculture;
 - (b) the improvement of education and administration relating to nutrition, food and agriculture;
 - (c) the conservation of natural resources and the adoption of improved methods of agricultural production;
 - (d) the improvement of the processing, marketing and distribution of food and agricultural products;
 - (e) the adoption of policies for the provision of adequate agricultural credit, national and international;
 - (f) the adoption of international policies with respect to agricultural commodity arrangements.
3. It shall also be the function of the Organization:
 - (a) to furnish such technical assistance as governments may request;
 - (b) to organize, in cooperation with the governments concerned, such missions as may be needed to assist them to fulfil the obligation arising from their acceptance of the recommendations of the United Nations Conference on Food and Agriculture and of this Constitution; and
 - (c) generally to take all necessary and appropriate action to implement the purposes of the Organization as set forth in the Preamble.

Source: *Basic Texts of the Food and Agriculture Organization of the United Nations*, 1980 Edn., vol. 1, (Rome, 1980), pp. 3-4.

APPENDIX B

BUDGET OF FAO: MEMBER GOVERNMENTS' CONTRIBUTIONS (%), 1985

Afghanistan	0.01	Burma	0.01
Albania	0.01	Burundi	0.01
Algeria	0.16	Byelorussian SSR	-
Angola	0.01	Cameroon	0.01
Antigua & Barbuda	0.01	Canada	3.72
Argentina	0.86	Cape Verde	0.01
Australia	1.90	Central Afr. Rep.	0.01
Austria	0.91	Chad	0.01
Bahamas	0.01	Chile	0.08
Bahrain	0.01	China	1.06
Bangladesh	0.04	Colombia	0.13
Barbados	0.01	Comoros	0.01
Belgium	1.55	Congo	0.01
Belize	0.01	Cook Islands	-
Benin	0.01	Costa Rica	0.02
Bhutan	0.01	Cuba	0.11
Bolivia	0.01	Cyprus	0.01
Botswana	0.01	Czechoslovakia	0.92
Brazil	1.68	Denmark	0.91
Bulgaria	0.22	Djibouti	0.01
Burkina Faso	0.01	Dominica	0.01

Dominican Rep.	0.04	Honduras	0.01
Ecuador	0.02	Hong Kong	-
Egypt	0.08	Hungary	0.28
El Salvador	0.01	Iceland	0.04
Equatorial Guinea	0.01	India	0.43
Ethiopia	0.01	Indonesia	0.16
Fiji	0.01	Iran	0.70
Finland	0.58	Iraq	0.15
France	7.86	Ireland	0.22
French Overseas Territories	-	Israel	0.28
Gabon	0.02	Italy	4.52
Gambia	0.01	Ivory Coast	0.04
German Dem. Rep.	-	Jamaica	0.02
Fed. Rep. Germany	10.31	Japan	12.46
Ghana	0.02	Jordan	0.01
Greece	0.48	Kampuchea	0.01
Grenada	0.01	Kenya	0.01
Guatemala	0.02	Kiribati	-
Guinea	0.01	Rep. of Korea	0.22
Guinea-Bissau	0.01	Dem. People's Rep. of Korea	0.06
Guyana	0.01	Kuwait	0.30
Haiti	0.01	Lao People's Dem. Rep.	0.01
Holy See	-	Lebanon	0.02

Lesotho	0.01	New Caledonia	-
Liberia	0.01	New Zealand	0.31
Libya	0.31	Nicaragua	0.01
Liechtenstein	-	Niger	0.01
Luxembourg	0.07	Nigeria	0.23
Madagascar	0.01	Norway	0.62
Malawi	0.01	Oman	0.01
Malaysia	0.11	Pakistan	0.07
Maldives	0.01	Panama	0.02
Mali	0.01	Papua New Guinea	0.01
Malta	0.01	Paraguay	0.01
Mauritania	0.01	Peru	0.08
Mauritius	0.01	Philippines	0.11
Mexico	1.06	Poland	0.87
Monaco	-	Portugal	0.22
Mongolia	0.01	Qatar	0.04
Morocco	0.06	Romania	0.23
Mozambique	0.01	Rwanda	0.01
Namibia	0.01	St Christopher & Nevis	0.01
Nauru	-	St Lucia	0.01
Nepal	0.01	St Vincent & the Grenadines	0.01
Netherlands	2.15	Samoa	0.01
Neth. Antilles	-	San Marino	-

São Tomé & Príncipe	0.01	Tunisia	0.04
Saudi Arabia	0.04	Turkey	0.39
Senegal	0.01	Tuvalu	-
Seychelles	0.01	Uganda	0.01
Sierra Leone	0.01	Ukrainian SSR	-
Singapore	-	United Arab Emirates	0.19
Solomon Islands	-	United Kingdom	5.64
Somalia	0.01	U.K. Overseas Territories	-
South Africa	-	USA	25.00
Spain	2.33	Uruguay	0.05
Sri Lanka	0.01	USSR	-
Sudan	0.01	Vatican City	-
Suriname	0.01	Vanuatu	0.01
Swaziland	0.01	Venezuela	0.66
Sweden	1.59	Vietnam	0.02
Switzerland	1.33	Yemen	0.01
Syria	0.04	Yemen (Dem.)	0.01
Tanzania	0.01	Yugoslavia	0.56
Thailand	0.10	Zaire	0.01
Togo	0.01	Zambia	0.01
Tonga	0.01	Zimbabwe	0.02
Trinidad & Tobago	0.04		

Source: Douglas Williams, *The Specialized Agencies and the United Nations: The System in Crisis*, New York, St. Martin's Press, 1987.

APPENDIX C

FAO Expert Consultation

on

ENERGY CROPPING VERSUS FOOD PRODUCTION

Rome, 2-6 June 1980

PARTICIPANTSALGERIA

BOUKLI, H.T.
Ministère de l'Agriculture et de la
Réforme Agraire
12 Bd. Amirouche
Alger

AUSTRALIA

STEWART, G.A.
Division of Chemical Technology
Commonwealth Scientific and Industrial Research
Organization (CSIRO)
Box 1666
Canberra City, A.C.T.

BANGLADESH

ALAMGIR, G.A.
(Bangladesh Institute of Development Studies)
Visiting Fellow, Harvard Institute for
International Development
1737 Cambridge Street
Cambridge, Mass. 02138, U.S.A.

BRAZIL

MONACO, L.C.
Secretaria de Tecnologia Industrial
SAS-Quadra 2, L 1 a 3
Brasilia, 70070

DENMARK

PINSTRUP-ANDERSEN, P.
(Agricultural University, Copenhagen)
Research Fellow
International Food Policy Research Institute
1776 Massachusetts Avenue, N.W.
Washington, D.C., 20336, U.S.A.

FRANCE

LUCAS, J.
Centre National d'Etudes et d'Expérimentation
Du Machinisme Agricole (CNEEMA0
Parc de Tourvoie
92160 Antony

HUNGARY

UJHELYI, T.
Research Institute for Agricultural Economics
Zsil u. 3-5
Budapest

INDIA

MANOHAR RAO, P.J.
Directorate of Sugar
Ministry of Agriculture
Government of India
New Delhi, 110 001

KENYA

MUTHAMA, J.K.
Ministry of Agriculture
P.O. Box 30028
Nairobi

PHILIPPINES

DRILON, J.D.
Philippines Council for Agriculture and
Resource Research (PCARR)
College, Laguna

SUDAN

EL HAG, Hassan El-Tayeb
Sudan Gezira Road
Barakat

THAILAND

APHIRAT, Arunin
National Research Council
196 Phaholyothin Road
Bangkhen, Bangkok 9

U.K.

KING, G.H.
Energy Technology Support Unit
Atomic Energy Research Establishment
Harwell, Oxon

U.S.A.

BULL, T.
Office of Technology Assessment
U.S. Congress
Washington, D.C. 20510

ZAIRE

MUKENDI, Mbuyi Tshingoma
B.P. 1112
Kinshasa I

OBSERVERSAUSTRIA

MEYRATH, J.
Institute of Applied Microbiology
Peter-Jordan Strasse 82
1190 Vienna

CANADA

QUELLETTE, J.
CIDA
200 Promenade du Portage
Hull, Quebec KIA OG4

FURNISS, I.F.
Department of Agriculture
Ottawa

ECUADOR

PANIAGUA-URDIALES, E.F.
Organization Latino Americana de Energia (OLADE)
Casilla 119A
Quito

FRANCE

DADANT, R.
Institut de Recherches Agronomiques Tropicales
et des Cultures Vivrières (IRAT)
100 rue de l'Université
75007 Paris

FED. REP. GERMANY

von HAUGWITZ, H.W.
German Agency for Technical Co-operation Ltd. (GTZ)
P.O. Box 5180
D-6236 Eschborn 1

von GROTHUSS, O. Frhr.
German Agency for Technical Co-operation Ltd. (GTZ)
P.O. Box 5180
D-6236 Eschborn 1

ITALY

PELLIZZI, G.
(FAO/REUR Consultant)
University of Milan
2, via Celoria
Milano 20133

NETHERLANDS

VERKOREN, H.
Ministry of Agriculture and Fisheries
Bezuidenhoutseweg 73
The Hague

BRAND, L.J.
Ministry of Agriculture and Fisheries
Bezuidenhoutseweg 73
The Hague

SPAIN

NADAL AMAT, A.
Instituto Nacional de Investigaciones Agrarias
Crida 04
Cabrils
Barcelona

SWEDEN

BERGMAN, K-G.
Swedish University of Agricultural Sciences
S-750 07 Uppsala

ECKERSTEIN, I.
Swedish Embassy
Rome

U.K.

ADAIR, D.
Tropical Products Institute
Culham
Near Abingdon
Berks.

HARRISON, J.D.L.
Energy Technology Support Unit
Atomic Energy Research Establishment
Harwell,
Didcot, Oxfordshire

U.S.A.

MEEKHOF, R.L.
Department of Agriculture
500 12th St.
Room 200
Washington, D.C.
20250

JACKSON, R.I.
Agency for International Development (AID)
DSB/AGP/AP
SA-18 Rm. 413-F
Washington, D.C. 20523

DE LUCIA, R.
Consultant, Rockefeller Foundation
1133 Avenue of the Americas
New York
N.Y. 10036

UNIDO

MAUNG, M.
United Nations Industrial Development Organization
P.O. Box 300
A-1400 Vienna
Austria

WORLD BANK

SPEARS, J.
World Bank
1818 H. St.
Washington, D.C.
U.S.A.

IFAD

JAYASINHA, A.
IFAD
107 Via del Serafico
00142 Roma

WFC

KAUSHIK, R.
World Food Council
Via delle Terme di Caracalla
00100 Roma

OECD

CATHELINAUD, Y.
OECD
2, rue André Pascal
F-75016 Paris

IFAP

KING, D.
 International Federation of Agricultural
 Producers (IFAP)
 1 rue d'Hauteville
 75010 Paris

FAO PARTICIPANTS

BOMMER, D.F.R., AGD
 von HUELST, H.J, AGS
 HRABOVSKY, J.P., AGD
 FAIDLEY, L.W., AGS
 BARREVALD, W.H., AGS
 POETIRAY, P., AGP
 de MONTALEMBERT, M.R., FOD
 HIGGINS, G.M., AGL
 VIANNA, J.L.N., ESC
 MOUTTAPA, F.J., AGD
 RASK, N., (Consultant)
 TYNER, W.E., (Consultant)
 STOUT, B.A., (Consultant)
 GRIFFITH-JONES, T., (Consultant)

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