
Water:

SOURCE OF FOOD SECURITY



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Regional Office for Asia and the Pacific

Water:

source of food security

2002 World Food Day

Bangkok, 14 October 2002

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Regional Office for Asia and the Pacific

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2002 World Food Day/TeleFood theme

Each year on 16 October, the Food and Agriculture Organization of the United Nations celebrates World Food Day — in commemoration of its founding on that day in 1945. The World Food Day/TeleFood theme for this year, **Water: Source of Food Security**, recognizes the essential role freshwater plays in feeding the global population and ensuring food security – having regular access to enough high-quality food to lead active, healthy lives. Currently, more than 800 million people do not have enough to eat.

Limited access to water is increasingly becoming a constraint to food production. Water covers three quarters of the Earth, but only a small fraction is accessible as freshwater. Of the total amount of water withdrawn, agriculture claims almost 70 percent to produce the

food that fuels human activity. As population grows, so too will food needs. FAO estimates that by 2030, the world will require 60 percent more food. About 80 percent of that increase will come from intensified agriculture supported by irrigation.

But water is already scarce in many countries. An FAO study of 93 developing countries indicates that a number of nations are already withdrawing water supplies faster than they can be renewed. Ten countries are in a *critical* state meaning they withdraw more than 40 percent of their total water resources for agriculture and another eight are water *stressed*, withdrawing more than 20 percent. At the same time, the competition for water from industrial and domestic users continues to grow.

FAO is convinced that the

solution to meeting future food and water needs is to improve agricultural productivity and water use efficiency. By using better seeds, boosting soil fertility and improving on-farm water management, farmers produce higher yields, obtaining the greatest gains from precious water supplies.



But even where water is plentiful, access to it is not always equitable. For example, special attention should be paid to women, who represent the majority of the developing world's farmers yet are often excluded by tradition from owning land and managing water.

Another concern is keeping water use within limits, so that use in one area doesn't deprive people of access in another. Environmental impacts must also be kept to a minimum: while irrigated agriculture can yield two to three times as much as rain-fed lands, attention must be paid to proper drainage in order to prevent water-logging and salinity build-up.

At the same time, agriculture must compete for water with municipalities and industry. Currently, industry claims about 20 percent of total water withdrawals and municipal users the remaining 10 percent. Agriculture will be under increasing pressure to use water more efficiently and to improve the quality of the water that it returns to watercourses and aquifers.

Improving irrigation efficiency will also be vital. The most common forms of irrigation – flood and sprinkler irrigation – can result in more water being applied than can be taken up by crops. More efficient and localized methods such as drip irrigation, which put water only where it's needed, can significantly reduce agricultural water demand. Rain-fed agriculture benefits from agricultural practices adapted to uncertain water availability. By construct-

ing water harvesting structures ranging from small furrows to dams, farmers can conserve rainwater and direct it to crops. This practice can boost yield two to three times over conventional farming.



Policies and strategies to guide agricultural water use are needed on the international, national and local level. And when major sources of water cross borders, international agreements help to regulate how much water is allocated to each country or region. At the same time, existing local traditions of water management and access need to be respected and incorporated into policies and supporting legislation.

To back up new water policies, investment is required. National governments will need to establish the conditions to attract such investment. Innovative forms of credit will help the poor to take advantage of improved water manage-



ment techniques.

Water is one of the most pressing issues in development today. The choice of this year's World Food Day/TeleFood theme, **Water: Source of food security**, serves as a call to governments, civil society and the international community to recognize the importance of water in achieving food security. World Food Day and TeleFood activities around the globe will help to deliver this important message about water while promoting the overall objective of this annual event: to raise awareness about the problem of hunger and to work towards long-term solutions to guarantee food for all.

FAO looks forward to commemorating the upcoming International Year of Freshwater in 2003. And FAO will be present at the 3rd World Water Forum in Japan next year where it will deliver this message: We **can** find enough water to feed the world, but we must pool our resources and strengthen our commitment to improve water management for agricultural production.

Address by HE Sora-at Klinpratoom Minister of Agriculture and Cooperatives, Thailand

It gives me great pleasure to join all of you today in the 2002 regional celebration of World Food Day in Bangkok. This is a special occasion for FAO and Thailand also because this year marks the 50th anniversary of the establishment of the FAO Asia-Pacific office in Bangkok. Thailand is most honoured to continue hosting the FAO regional office, and fully aware that FAO has been guiding and assisting countries in the region to fight hunger and poverty for the past half a century.

The theme of this year's World Food Day *Water, source of food security* is especially relevant and of the highest importance for Thailand's future agricultural development.

Despite rapid industrialization and development of services over the past decades, Thailand's economy is still largely based on agriculture, which employs 60 percent of our people. Agricultural development is the highest among our national priorities, not only for ensuring sufficient food for all, but also for creating rural employment and thus helping fight poverty which is the main cause of hunger.

It is a well known fact that besides fertile land, water is the key agricultural resource that enables Thailand to continue producing farm surpluses for export, in particular rice, which is an important foreign exchange earner.

Although Thailand as a whole is blessed with ample water resources, the geographical distribution of water is uneven. In particular, the Northeast of Thailand known as Isaan faces a serious water shortage with long dry spells even during the monsoon, resulting in low crop yields and less income for farmers.

Agricultural and rural development programmes initiated by Thai government now and in the past have emphasized the development of water resources and practically eliminated malnutrition from the country. Thailand's water resources development budget has steadily increased and presently absorbs a large amount of the national budget for development.

Thailand has also benefited greatly from the wisdom and guidance of His Majesty the King who has always recognized the importance of water in the life of the people.

His "New Theory" on land management and development of water resources for agricultural purposes has been of immense value in promoting sustainable farming practices. He advised farmers in drought prone regions to reserve 30 percent of their land for the construction of farm ponds to store rain water for use during dry spells. This has brought significant increases in crop yields and incomes to farmers in a number of Royal Projects where this theory was applied.

As in most countries of the world, agriculture is the highest consumer of water in Thailand, with a present share of more than 70 percent. Growing demand from other sectors such as industry, tourism and domestic use, together with an expansion of irrigated land, means that there will be less water available per unit of land in future.

This should not cause major problems if water is used more efficiently. We have to establish and enforce incentives, regulations and penalties that will guide and convince farmers to make more rational and equitable use of this precious resource.

Thailand is furthermore going to restructure its agricultural sector as a whole using a US\$600 million loan from the Asian Development Bank to finance, among others, several projects to improve our irrigation systems, including a restructuring of the Royal Irrigation Department.

We are also very grateful to FAO for providing us with technical assistance in the formulation of a World Bank-funded project on natural resources management as well as in providing training for Royal Irrigation Department staff in participatory irrigation management, legal aspects of water user associations, water use rights, strategic planning, monitoring and evaluation.

This year's World Food Day has provided us with another opportunity to reaffirm our commitment and political will to the fight against hunger. As part of our efforts to alleviate poverty and achieve higher and sustainable agricultural production, Thailand established a national water vision in 1997 which declares:

"By the year 2025, Thailand will have sufficient water of good quality for all users through efficient management and an organizational and legal system that will ensure equitable and sustainable use of water resources, with due consideration for the quality of life and the participation of all stakeholders."

We are now going to translate this vision into action and I am confident that we will succeed in attaining our goal of food security for all.

Thank you.

يوم الأغذية العالمي

16 أكتوبر/تشرين الأول 2002

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Message of the FAO Director-General Jacques Diouf

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Water is central to the survival of humanity. It is a matter of great concern to all, because a limited resource shared by a growing population.

Water has political, economic, social and ecological implications. But it is above all linked to food, for 70 percent of the world's water resources are used for agriculture.

In a world with diminishing supplies of drinking water, how are we to ensure that all have the water they need to feed themselves without harming other sectors, without destroying our environment?

This is first and foremost a challenge for agriculture. The production chain must produce more with less water, and small farmers need to play a part. They must therefore be trained and actively involved.

A new water policy is needed, with priority to solutions that avoid waste.

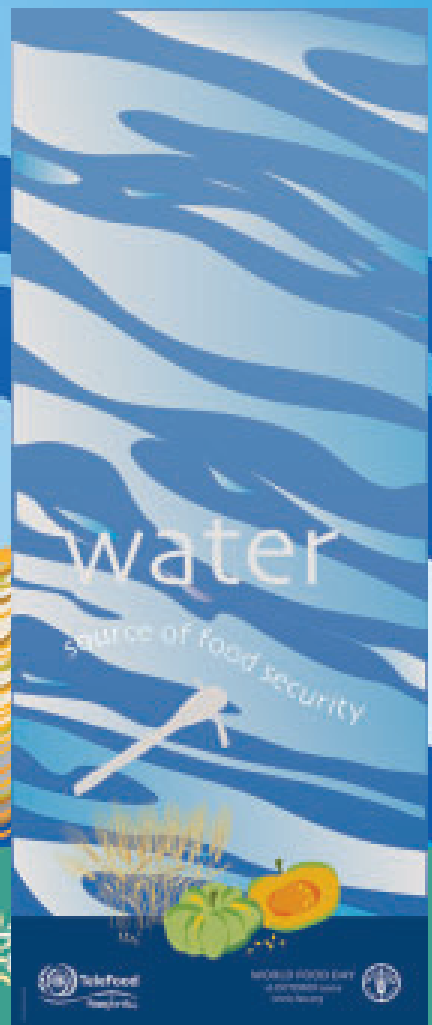
More effective solidarity should call on the cooperation of all development partners in resolving potential conflicts and mobilizing financial resources. The conditions are also needed for the economic management and fair distribution of water.

Greater mobilization of civil society and farmers' organizations is fundamental if we are to tackle the water crisis and finally achieve our objective of 'Food for All'.

Closer monitoring is needed, especially in countries and regions that are affected by drought, so that famine and conflict can be avoided.

Tomorrow's world will have enough water if we start managing it prudently today.

That is the meaning of the message of World Food Day: "Water: source of food security".



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世界粮食日

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Statement by Changchui He

FAO Regional Representative for Asia and the Pacific

On behalf of the Director-General of FAO Jacques Diouf, and on my own behalf, I have great pleasure in welcoming you all to the FAO Regional Office for Asia and the Pacific for the commemoration of World Food Day 2002 which marks the 57th birthday of FAO. It is also a special occasion for Thailand and the FAO regional office, which was established in Bangkok 50 years ago.

This year's World Food Day theme, *Water: source of food security* states a well-known fact. It also highlights what is not so well known, namely, that the limited availability of water for agriculture is increasingly affecting the ability of the world's farms to produce enough food for a growing population.

This is especially true of the Asia-Pacific region, which accounts for more than half of the world's agricultural water use. Three-fourths of the world's farm population lives in countries in this region and, on average, the water availability for agriculture in Asia and the Pacific is one-sixth of that in the rest of the world. Asia-Pacific farms have to feed half of the world's population living in the region, which includes two-thirds of the 800 million hungry people in the world.

Warnings of water scarcity may sound strange at a time when large parts of our host country Thailand and other countries in Asia are affected by severe floods. But it is only a matter of time before the floods recede and soils become dry again. The successive floods and droughts in the region show the uneven distribution of water through the year, with most of the water flow in the big rivers confined to just a few months.

The WFD 2002 message emphasizes that enough water is available to produce food for all if we learn to manage this finite resource wisely and produce 'more crop per drop'. This is all the more necessary because the use of water by agriculture is facing growing competition from industrial and urban domestic consumers.

This year's WFD theme aims to increase awareness among governments, civil society and the international community of this fact. Above all, it is a call for strengthening political commitment to ensure adequate investment, suitable policies, institutions and infrastructure to ensure fair and equitable access to as well as efficient use of the water available for agriculture.

Declining national and donor support to development of water resources is a cause for concern. We at FAO estimate that irrigation needs about one-third of the US\$30.7 billion additional annual investment required in agriculture in developing countries to ensure food security.

We have to introduce improved technologies and farming practices, and train farmers to manage and use water wisely, and help decision makers to develop and enforce policies that encourage sustainable water use. We have to increase productivity of the region's large rainfed areas and modernise wasteful water delivery and irrigation systems. Irrigated agriculture will need to be rethought. This will involve a shift from a supply-driven to a demand-responsive approach, with greater participation by water users.

It is also a reminder to agriculture to shoulder its environmental responsibilities much more actively. Intensive agricultural

water use can result in large-scale environmental damage in the form of water-logging and salinization. Indiscriminate and improper use of chemical fertilizers and pesticides can cause irreparable damage to surface and groundwater reserves, leading to environmental catastrophe.

The WFD theme reminds us of the close link between water and politics. This precious natural resource is at the root of a number of difficult international and intra-national water sharing disputes in the region. FAO, through its technical cooperation programmes, is helping ensure fair and equitable access to shared water resources. Policies and agreements to guide agricultural water use are as important at the international as at the national and local levels.

The choice of the WFD 2002 theme by FAO supplements its leadership role in the commemoration of the UN's International Year of Mountains this year. More than half the world's population relies on water that originates from mountains, which for this reason are also known as 'water towers of the earth'. Asia and the Pacific has the world's highest peaks and some of the world's mightiest rivers emerge from these mountains. Hence, sustainable management of mountains and watersheds are of particular interest and importance to this region.

The WFD theme is also closely linked to the upcoming International Year of Freshwater in 2003 and the Third World Water Forum, to be held in Japan next year. We at FAO will continue to seek close partnership with interested partners and various stakeholders to play an important role.

Thank you



Water: source of food security

Keynote speech by Y.K. Alagh



There has in this decade been new understanding in the area of food security to the effect that the agenda is not just grain production and targeted employment and food distribution programmes for poor populations. Such programmes have a role, but only as a part of a strategy and a policy framework of widespread growth and income generation and this may also in fact under fairly plausible circumstances require diversification away from grains. Land and water development programmes are a central part of this approach. Much of the discussion at Johannesburg and earlier at WFS+5 was around the findings by now well known that widespread agricultural growth based on sustainable land and water development and management programmes, has a dual effect: – food commodities become available at cheaper prices and sufficient and sustainable employment and income is generated.

A large part of the poor and hungry segments of the work force are low productivity food producers. Demarcation of hunger zones – and targeted programmes – has to take this larger context into account. This larger context is the requirement of an explosion of small projects of a sustainable kind on land and water development, diversi-

fied agricultural sub-economies on and of food, non-food crops and non-crop based agriculture like animal husbandry, fish, and tree crops and rural diversification possibilities. Markets, training for processing and trade, and first stage processing are examples. Development of newer organisational systems which encourage fast replication of success stories and credit reform are essentials, as also macro policy reform targeted at the agricultural sector.

Developments at Johannesburg have seen a major improvement in the understanding of the new paradigms and concretisation of the partnership and financing arrangements for it. We trace these developments and make a plea that the Asia-Pacific region must aim at policy convergence to push these concrete agendas forward, so that water and food security targets are achieved. Otherwise flag waiving and slogans on environment will not really push the Sustainable Development Agendas beyond Rio and Rio was ten years ago.

Recent work with participative rural appraisal analysis suggests that the earning power of hungry households is related in a significant manner with the demographic status of the household (hungry households more often tend to be women headed or consist of disabled

workers) and health status of the members of the household (morbidity significantly reduces economic status). On the positive side, hungry households in rural areas showed considerable dignity and desire to improve their status. The democratic policy was seen as a factor empowering them and in fact there was considerable resistance in classifying themselves as destitute or hungry. Food security policies have to be embedded in more general human security approaches.

A hunger removal programme, embedded in a food security strategy will have to be a part of the wider process of diversification of agriculture and larger exposure to trade. Sustainability considerations will also require release of land from low productivity cereals to more appropriate cropping sequences in different agro-climatic regimes.

There is evidence to suggest that short sighted policies at the international level are leading to diversification trends being reversed by distorted trade practices. This is strange since trade should normally hasten diversification and suggests that macro and trade reform needs strategic synchronisation with the poverty removal agenda.

Food prices, poverty, hunger and food security

An increase in food prices makes the poor relatively worse off, as amongst others a classic Indian study by R.Radhakrishna in a framework of complete demand systems had shown in one of the earlier works of this type. Such work using large data sets of time series of cross-sections of household budgetary studies, led to the by now "conventional knowledge" that faster increase in food prices would make the poor justifiably feel relatively more deprived. With food stocks, foreign exchange reserves, monitoring methods and remedial policies, these trends can be avoided. [...]

In India, the present author was the chairman of the Alagh Task force that defined the poverty norm at 2400 Kcal per person for rural areas and 2100 Kcal for urban areas, or the poverty line, is anchored in a given calorie norm and the corresponding all-India consumption basket for 1973-74. It also developed a procedure for updating the poverty norm for years for which household consumption surveys were not available. Based on demand and income distribution studies done by Radhakrishna and his associates, the task force developed income and price responses of both poor and rich households separately in rural and urban areas. This work started a

tradition of econometric investigation which has continued (Table 1 below gives some recent estimates.) This meant that income supplementation and public distribution policies working through pricing and dual markets (an open market and a rationing system) could be integrated quantitatively into commodity market and policy reform specifically aimed at households below the poverty line. This was the beginning of market based solutions to the problem.

India and some other countries, notably the Arab Republic of Egypt, adopted a system of dual pricing in respect of selected goods of mass consumption. The rationale of such a policy is derived from the fact that price elasticity in respect of essential commodities - cereals, pulses, edible oils - is relatively higher for persons below the poverty line both in urban and rural areas. These kinds of policies are now undergoing dramatic changes in a phase of rapid growth, opening up of economies to trade impulses and diversification.

Agricultural growth and diversification and food security

The diversification of the agricultural demand basket became a significant feature of the ESCAP economies from the mid-eighties onwards. FAO projected that up to 2010, GDP

growth would be 7 percent annual in East Asia and 4.4 percent in the Near East and North Africa, with the West Asian (Near East) component growing faster. Per capita income growth was 5.7 percent annual for East Asia. With this kind of income growth there was a shift of demand to non-cereal food items and commercial crops. Oilseed demand, for example was to grow at 4.2 percent annual in East Asia and 4.1 percent annual in the Near East and North Africa. Countries projected to have high volumes and growth of agricultural imports were Japan, Hong Kong, the Republic of Korea, Saudi Arabia, Singapore, Malaysia, Indonesia, the Islamic Republic of Iran, Thailand, Kuwait and Oman. These countries were estimated to be large and growing markets for fruit and vegetables, meat and countries like Japan and Korea, of fish. In fact up to the mid nineties the agricultural import of each of these countries was growing between 4 to 8 percent annual.

[...]

Studies by the International Food Policy Research Institute suggest that malnourished children of age five years or below, in rural India are now placed at 250 million. The only rural area in Asia, where this number is marginally exceeded is China, where malnourished children are placed at 266

Table 1
Price elasticities: 1998

Commodity	Rural		Urban	
	Persons below poverty line	Persons above poverty line	Persons below poverty line	Persons above poverty line
Cereals	-0.530	-0.161	-0.430	-0.099
Edible oils	-0.794	-0.589	-0.799	-0.417
Sugar	-0.941	-0.800	-0.740	-0.294

Source: Ravi, C. (2001), Complete Demand System, Welfare and Nutrition: An Analysis of Indian Consumption Data, Phd dissertation, Centre for Economic and Social Studies, Hyderabad

million. China and India are large countries and so the absolute numbers are large, but substantial numbers are undernourished in the rest of South Asia and also countries like Thailand, Indonesia, Malaysia and the Philippines. These are also all countries with a demonstrated capacity to grow grain.

[...]

However, grain growth will slow down more than in the past. In fact livestock production grew by 4.3 percent in South Asia and generally the pattern is that non grain crops grow faster than grain crops and animal husbandry and fish even faster. Diversification is the name of the game and incomes grow fast in response to demand changes. But it is not happening fast enough. You need investment in land and water and as the Bangkok Declaration says, there is synergy in land and water investment when it is made together. You need reform and investment in rural infrastructure. This reform is more difficult. [...]

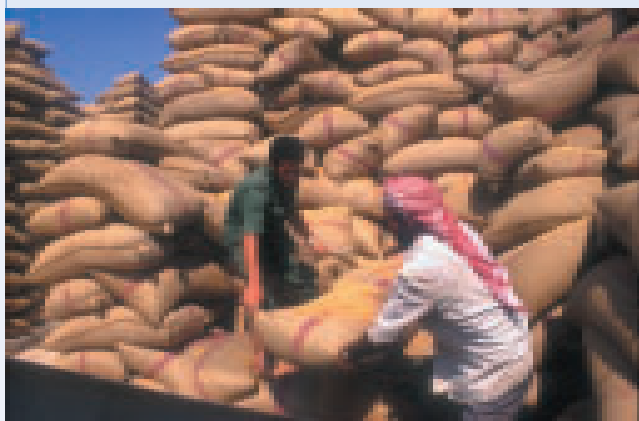
More recently the East Asian slowdown seems to have led to a slowdown in the diversification of the agrarian economies of the NIE's and this is genuinely worrying since IFPRI models have conclusively demonstrated that without trade and infrastructure reform the poverty and food security agenda will definitely get a setback. I have for this lecture developed a simple indicator of diversification' namely the

change in the index of livestock production in a country divided by the index of agricultural production. According to World Development indicators, long term annual GDP growth rate through 1997 was 6.9 percent, 7.0 percent, 7.3 percent, 8.1 percent for Indonesia, Malaysia, Thailand and the Republic of Korea, respectively. In the period 1984 to 1994, the incremental livestock to agricultural production ratio was 2.12, 2.18, 2.59 and 2.56 respectively for these countries. For those of you who are economists this emerges from the Engels Law. The GDP growth of these countries went down to 4.7 percent, 2.9 percent, 0.3 percent and 4.4 percent and the incremental livestock to agricultural production ratio went down to minus 1.79, 1.01, minus 1.61 and minus 0.72 in these countries, from 1994 to 1999. On the other hand countries like China and India which grew at around 8 percent and 6 percent respectively since 1980 and where the growth did not decelerate, had the incremental livestock to agricultural production ratio of 1.82 and 1.15 in the earlier period and 1.59 and 1.53 in the later period suggesting that the momentum of diversification and widespread agricultural growth was kept up. Again detailed data on vegetable and fruit production is available only for the nineties, but the incremental vegetable to cereal production ratio is minus 1.14 in Indonesia, minus 2.58 in Malaysia, minus 0.3 in Thailand and 1.43 in South Korea from 1994 to 1999. In fact since grain

exporters. These are fairly serious matters and highlight the importance of macro policies if poverty removing agendas are to be given priority.

Approaches such as that contained in Robert Wade's well known World Politics Paper on East Asia's Economic Success and his famous justification of 'strategic trade theory' is I believe still relevant. Wade's paper shows that it is a small world, since he begins and ends his paper with a reference to an Indian description of South Korea's policy perspectives in the early phases of industrialization. The reference by Wade to a South Korean perspective from Y. K. Alagh's view from South Asia in the Asian Development Bank's journal the Asian Development Review (Y.K. Alagh, 1989) became a widely cited part of the strategic trade theory literature. Later, for example John Stopford was to place this experience in a larger strategic global political economy perspective and draw management implications for the global firm from it in a contemporary perspective. As Stopford argues a strategic approach to policy in a globalised economy is not easy, since mindless intervention can breed sloth and vested interest, but there is no question that as Stiglitz has recently shown, there is no unique way to reform and the poverty agenda should be a part of the agenda.

What is the nature of reform required? The problem of imposing a hard budget constraint at the local level and helping those who help themselves, is a difficult one to address. Another way of setting the problem, is to harness the great vitality of decentralized markets in replicating widespread rural growth, within the core areas of local and global concern. The need is to harness the great vitality of decentralized markets in replicating widespread rural growth, with



export is highly subsidized in the OECD countries there are further constraints on diversification as some Asian countries are also grain

institutions and organizations which foster limited and well focused areas of community and cooperative action. If a community is willing to pay the price of reform, it should not be asked to wait, for the reform as designed by a global or national institution, for the system as a whole.

Watershed development, for settled agriculture alternately tree crops, reclamation of saline lands, farmers run lower level irrigation systems, aquifer management in difficult situations, like coastal aquifers, tribal irrigation cooperatives, tank irrigation have all been reported as success stories in the context of poverty removal and food security and studied. The question is replicability on a larger scale.

1. Success stories are community and leadership based, with leadership coming from diverse sources - a progressive farmer, an NGO, a local army retired person, a 'concerned' civil servant, a scientist working in the field. The leaders either had a science background or new enough to adapt from a nearby science institution. The organisation structure was neither purely private ownership, nor fully community or social control. The leadership invariably argued for aggressively functioning markets and land ownership was private and agricultural operations at the household level. However there was for land or water management, limited and well defined cooperation. This could be drainage, soil shaping, contour management, improvement and management of lower level canals, de-silting of tanks, raising embankments, fish culture, market development, controlled grazing and so on. They estimated the land and water development costs, The labour compo-

nent, 'outside finance', the output in terms of food requirements met, energy requirements met and fodder supplies. There were estimates of 'economic rates of return on the investment', i.e. at accounting border prices, with a shadow wage rate 25 percent higher than the market rate. Financial rates of return at market prices were also estimated. These studies showed high economic rates of return, 18 percent plus, making them very productive investments.

2. There have to be well identified shelves of a large number of such small projects on land, water and other infrastructure projects available for financing.
3. Financial institutions have to design structures such that community collateral is possible for viable projects. Self help financing groups are only one such group. Land and water development groups, local infrastructure projects, in road or communication sectors, productionising products developed in R&D institutions, training for production with improved techniques, market development schemes developed by local and community groups would be other examples;
4. Lending through a weather or project cycle would be necessary.
5. Developing policy "champions" for sorting out administrative, financial and procedural issues at local, regional and national levels, when problems arise with these kind of development strategies. It is reasonably certain that problems are

going to arise in development experiments which are off the beaten track. The question then is, is there somebody in the policy decision making structure who will sort out the problem. ADB reports in a detailed study of farmer managed irrigation systems, that the failure cases were those where such support did not exist. Failure here is defined as performance levels in water delivery lower than by government agencies.

There is by now considerable acceptance of these needs in the global debates. For example one of the preparatory meetings for the World Summit on Sustainable Development at Johannesburg was the Expert Thematic Round Table on Promoting Sustainable Development in A Globalizing World, Feb.2002. This expert group squarely addressed the issues we have been pleading for as listed above. The former Swedish P.M. Ulsten, the present author and the Former Environment Minister of New Zealand were the monitors for the different sections of the discussion. Amongst others "The following proposals for action emerged from the discussion of the Round Table are important, because with minor changes they have been incorporated in the Johannesburg Declaration:

- *Improve investment processes in developing countries and countries with*



economies in transition to facilitate access to credit lines as well as to preferential terms of financing and of providing funds for collateral support systems and sharing of investment risk. In this context, provide securities for local institutions involved in infrastructure development and specific knowledge based activities to support sustainable economic growth, through, for example, creation of collaterals, interest differentials and trading of financial papers. These processes should be targeted, amongst others, to artisan and producer groups linked with local and global markets, local government agencies providing social and economic infrastructure, and farming and rural communities.

- *Improve* coordination among international financial institutions and redirect funds to sustainable development projects.
- *Develop* new or *strengthen* existing mechanisms such as the Clean Development Mechanism (CDM), to finance or re-finance community projects in rural areas aimed at land and water development, agricultural diversification and agro-processing, development of infrastructure, trade, and rural energy supply.
- *Use* debt swap mechanisms to finance sustainable development projects including projects for environmental conservation.
- *Create* fairer trading systems through, for example, initiating consumer – producer partnerships for the production and consumption of goods and services that have positive social and environmental impacts and developing production and product standards for improving the competitiveness of those goods and services.

- *Strengthen* international support to developing countries for efforts of sustainable agricultural practices, while the global agricultural markets are being reformed.
- *Study* for the purpose of replication, existing models for providing access of rural communities to ICTs in order to enhance the level of information in rural communities on productions, crops, markets, prices and technologies as well as in support of medical services and education.”

Aspects of social and environmental degradation: hunger and poverty

Human security implies safety from chronic threats such as hunger, disease and oppression, linking it to the broader concept of human development. One third of people in the world live on less than US\$2 per day. More than one billion people in developing countries live without adequate housing, and an estimated 100 million are homeless. What is it that makes individual households as well as national and regional societies vulnerable to hunger and famine? How does the affected population cope with vulnerability and risks? And how far can research contribute to a reduction of these risks and strengthen the coping capabilities of these communities?

Endemic poverty can be different from both hunger and vulnerability. Poverty in India is now estimated at 28 percent of the population, but we know that people who claimed that they do not have two square meal a day went down to less than a twelfth of the population in 1993 from around a fifth in 1983.

Does environmental stress leading to famine situation have a different

impact on women, children or the aged? The questions about the linkages between hunger, poverty, land degradation, destruction of resources and demographic changes have been discussed for decades. The Brundtland Commission on Environment and Development stated: “Poverty is a major cause and effect of global environmental problems. It is theoretically futile to attempt to deal with environmental problems without a broader perspective that encompasses the factors underlying world poverty and international equality.”

It is mainly the poor that suffer from famine, hunger and malnutrition. But not all poor people are equally vulnerable to hunger, and it is not always the poorest who are exposed to the greatest risks. There are many other factors that determine the vulnerability to hunger. These include the risk of exposure to crises, stress and shocks. There is also the population which is subjected to risk by civil breakdowns and violence on a community scale. As the Chairman of the Advisory Committee of the Gujarat Disaster Management Authority I have argued that the fast development the state has gone through, without corresponding development in civil society organisations, can lead to greater vulnerability. If Gujarats manufacturing sector doubles every seven years as it has in the past and development takes place on a highly decentralised scale as it has, with every district having more than ten thousand workers in the manu-



facturing sector' when disaster hits like an earthquake or civil violence, the damage is far more. Earthquakes are natural, but damage depends on land use, the nature of development and social and governance institutions to cope up.

As vulnerability is not coincident with poverty, malnutrition or other indices of human deprivation, more research should be based on a better understanding of such environmental crises. Also public responses to improve the coping facilities of social groups should be assisted by targeted research and development projects, and not just by relief. A number of approaches have been chosen to address these problems (e.g. entitlement, empowerment, enfranchisement). Food security should be closely tied to human security. While food supply to the rural poor is still a major problem, more emphasis on urban food security is needed.

The general tendency to combat environmental and social forms of degradation as expressed in famine and poverty should be not only to be "reactive" but to stress preventive measures. The term "preparedness" should move into the centre of attention. This leads to the increased necessity of early warning systems. Policy makers have reacted already by establishing short and medium term early warning systems for the most vulnerable regions. The Famine Early Warning System being developed by the United Na-

tions is an example of such a reaction. However, without accurate socio-economic and political information from the field, such computer assisted warning systems based mainly on biophysical parameters, will not be able to accurately predict famines social breakdown in a given region.

The larger issues

The concept of partnerships should include phasing, sequencing and much greater understanding of the local nuances of the reform process. Our argument in each case is that policies for enduring development basically emerge from the positive energies, which can be generated by a socio-economic structure and such a process of development is sustainable in the sense that it generates resources for propelling it and also works within carrying capacities. The tasks of creative systems are to lay down the contours of such development and governance systems at national, regional and global levels have to support such development and help those who help themselves. The argument is that of meshing market and strategic objectives.

An interesting corollary of our argument is that such partnerships have to both local and global and the global questions cannot be addressed without addressing local and national issues. This was the basis of the Rio declaration and needs constant reaffirmation. The same issue has been emphasized

in the global models presented in the last few years. Sustainable policies are not just questions of global negotiations, but have to grapple with issues of energy require-

ments, land use, food demand changes and agriculture and technology for meeting industrial and service requirements. This point can be made in a somewhat different manner. If communities are out of balance with their resource endowments, there can be no question of significant advance in the areas of global concern like carbon sequestration or biodiversity.

Country case studies on large countries also bring out the severity of sustainability constraints being faced and the need to make a beginning to "favourable" paths immediately. China and India are two examples. Growth in large countries underlines the quantum jumps being faced. Indian studies make the point that if severe water shortages are to be avoided, the improvements in irrigation efficiency and cropping intensity will have to be much faster than historical rates. If bad coal of over a billion tonnes is not to be burnt for power needs, alternative energy management styles will have to be implemented and hydel and nuclear options considered, in addition to a major focus on renewables. Modern technology will have to be integrated with artisan and rural populations so that the benefits of national and global markets can percolate to the work force. Trade and globalisation will have to grapple with these questions. Regional arrangements may well be a part of the answer. If these kinds of links cannot be established in concrete terms, the concept of partnerships will remain an empty box, even after Johannesburg.

Thank you.



Y.S. Rao Awards for outstanding farmers

Shi Guangyin



Shi Guangyin is 59 years old, married, has four children and lives in Sidahao village, Haiziliang Township in Dingbian County in China's north-west Shanxi province. Over the past 40 years, Mr Shi has successfully fought back the Maowusu desert that once made farming extremely difficult in Dingbian. He has controlled 13 000 hectares of sandy land by planting a 50-km protection belt of trees and shrubs. In 1986, he set up China's first such desert controlling company in partnership with other farmers. About 300 households are now taking

part in the desert control operation and more than 60 percent of former desert land is now covered with trees and shrubs with an estimated commercial value of about USD\$4 million.

Mr Shi's efforts have brought prosperity to one of the country's poorest regions. Wheat yields have gone up by as much as 40 times in his village and all families have new houses. Sidahao has become a model for other areas in Dingbian that still remain below the national poverty line. His company has an annual gross income of about US\$130 000 and fixed assets worth close to US\$ 1.5 million.

Mr Shi has set up an elementary school and a night school for farmers in his village. He has attracted wide media publicity in China and won national awards such as National Poverty-Alleviation Hero and Excellent Greening Individual. He has been invited for meetings with top national leaders including with President Jiang Zemin, and attended conferences of the UN Convention to Combat Desertification (UNCCD). He believes that farmers in China and other

countries can follow his example and create prosperity even out of harsh conditions.

Genevieve Ichiro Rechelbang



The outstanding marine fisher from the Pacific, Genevieve Ichiro Rechelbang is 45 years old with four children and lives in Iyebukel Hamlet, Koror State in the Republic of Palau. A high school graduate, she gave up a regular paid job to take up full time fishing in the mid-1980s in order to ensure food security for her family.

Starting with a small boat she purchased in the early 1990's to go further out beyond the reefs into deep water, she is now a leading marine fisher with an average monthly income of US\$800. She usually sells her catch in the local market or processes it and also caters to special requests from individuals and restaurants in Koror.

According to a survey by the Office of Marine Resources in Palau on the role of women in fisheries, Mrs Rechelbang is one of the few women engaged in fishing there, who uses all fishing methods common in Palau. These include bottom fishing with hook and line; spear fishing with spear gun; general gleaning; night fishing; surround net; seine net; cast net; and trolling.

She is perhaps the first woman in Palau to dive into the sea with a fishing spear gun, which she also does at night with the aid of a flashlight. This is quite dangerous as the water is full of sharks, but they do nothing as long as she is careful. "I like fishing. I feel strong" after coming out of the water, she says. Her example has inspired other women in Iyebukel to learn diving and spear fishing from her and make her feel proud, Mrs Rechelbang says.

K. M. Opananda

The outstanding tea farmer from Sri Lanka, K. M. Opananda is 55 years old and has a plantation in Gonawalapathana village in Nawalapitiya town in the hills of central Sri Lanka. Married and with three sons, he is a chemical engineer by training who gave up an overseas job to

return to his farming roots nearly two decades ago.



Unlike his father who was a paddy cultivator, Mr Opananda decided to work on a 6-hectare tea garden he bought in the mid-1980s. Over the years, he has converted three-fifths of his low-yield seed-based tea plantation into a more productive one, with a capacity of 100 000 vegetative propagated plants. As he says, the switch is "a challenge for the small-holder" since it involves a wait of about five years before the planter gets a return on his investment.

Mr Opananda is the recognized leader of small tea farmers in Sri Lanka. For four years in succession, he has been elected president of the Sri Lanka Federation of Tea Small Holdings Development Societies, which represents 150 000 small tea farmers and has worked to obtain better deals from the tea factories. In addition, he is director of the Sri Lanka Tea Board, the Tea Research Institute, the National Institute of Plantation Management, and the Tea Association of Sri Lanka. The Tea Shakthi Fund, of which

he is the executive director, assists Sri Lanka's small tea farmers and has set up 11 profitably managed tea factories.

Ireen Tatong

A most recognized farmer, Ireen Tatong is 51, a mother of four children and lives in Nongbua sub-district, Phattananikom district of Lopburi province in central Thailand. A highly successful farm entrepreneur, whose mangoes frequently win the first prize for quality in provincial and regional contests, Mrs Ireen had to struggle through a series of unsuccessful ventures before tasting sweet success as a fruit farmer.

She took up mango farming 30 years ago and now harvests an average of 250 tonnes of fruit every year from her 16 hectares of mango plantation. She uses innovative techniques such as grafting for mango fruit initiation, drip-irrigation and the application of bio-fertilizers that ensure high yields and quality. She is one of the few mango farmers growing the fruit off-season for which she was honoured by leading Thai media



organizations in 1999.

Mrs Ireen is now well known and often invited by public and private horticulture institutions across the country to lecture and offer advice on fruit farming. Her farm is a centre for the transfer of horticulture technology and a provincial agro-tourism centre. She is a consultant on horticulture to the Member of Parliament from Lopburi, a member of the Advisory Committee on Agriculture of Lopburi Agricultural and Technology College and heads a number of local farm organizations. She has taken initiatives in sustainable horticulture like using fertilizer made from decayed mango, banana, guava and papaya fruit and non-chemical pesticides extracted from natural medicinal plants.

Honoured with the prize of “Outstanding Woman” of Lopburi province in 1999, she would like other farmers to follow her formula for success, which she describes as “hard work, sincerity and diligence and saving”.



methods and high-yielding rice varieties were introduced to their village in 1997. “Integrated pest management gives us more income from rice growing”, says Mrs Xuan. Together with changes in agricultural policies, this has enabled Mrs Xuan to double output to more than 7 tonnes of paddy per hectare during the winter-spring crop and to 4/5 tonnes per hectare for the two remaining crops. The income has allowed the family to buy additional land and it now owns 3 hectares of farm, one-third of which is a fruit orchard.

Using her experience, she has taken part in the selection of high-yield rice varieties that are suitable for export. She is also encouraging other farmers to use the right quantities of fertilizers and pesticides to reduce ecological damage. Mrs Xuan is a guide and mentor to the village women as vice-chairperson of the local women’s union, which has 500 members. She says that she wants to help the low-income women farmers in her village and has given out D35 million (about US\$2 000) in the form of rice seeds and cash loans. She will be repaid after the harvesting. She has also helped in setting up revolving funds, which provide interest-free loans to poor women farmers in the village.

Xuan Mai Phan Thi

An outstanding rice farmer, Xuan Mai Phan Thi lives in Hamlet 1, My Tan Commune, Cai Be district of Tien Giang province in southern Viet Nam. Thirty-nine years old and with one daughter, Mrs Xuan is growing paddy since her marriage in 1990.

Initially, her family faced difficult times because their traditional farming methods produced low yields and income. Things changed for the better when new farming





Annexes

Media coverage

- 14 October
- Announcement on Radio Thailand world service and an interview with He Changchui, RR (07:00 hrs.)
 - Advertisement in the Bangkok Post
 - Advertisement in the Nation
 - Late news report on WFD celebration at FAO Regional Office on Channel 11
- 16 October
- Report on WFD celebration at RAP and YS Rao awardee from Thailand on Radio Thailand world service
 - and an interview with He Changchui, RR (07:00 hrs.)
 - The recording of He Changchui's welcome address at WFD celebration on 14th Oct was played by Radio Thailand world service (7:30 hrs.)
- 21 October
- Late news report on national WFD celebration organized by the Ministry of Agriculture, in collaboration with the Rajabhat Institute of Ubonratchathani and RAP on Channels 5, 9, 11 and iTV.

World Food Day 2002

Water: source of food security

Asia and the Pacific is home to three-fourths of the world's farming water available for farming, on average, is one-sixth of that in the rest has two-thirds of the world's 800 million hungry people.

The theme *Water: source of food security* is meant to heighten awareness of water in achieving food security. It is a call for the more efficient use of limited supply of water in the face of competing demands from industry. Among other things, this would require reducing waste in large-scale agricultural practices suited to uncertain water availability in rainfed water policies at the national and international level, which in turn must be backed by adequate investment.

The theme supplements the **Anti-hunger programme announced at the Food Summit: five years later** in Rome, Italy where 179 countries World Food Summit pledge to halve global hunger by the year 2015. The programme outlines the action and additional resources needed to meet the target. Placed before world leaders at the August 2002 World Summit on Sustainable Development, the anti-hunger programme is also linked to the UN-led activities in support of the UN Millennium Development Goals.

World Food Day will be celebrated at the FAO Regional Office for Asia and the Pacific in Bangkok on **14 October 2002**. Guests invited to the function include officials of the Thai government, member of the diplomatic corps, staff of international organizations based in Bangkok as well as academics and representative organizations and foundations.

The FAO Regional Office for Asia and the Pacific is marking half a century of its presence in Bangkok this year. The past five decades have brought remarkable gains in agricultural and rural development in the region, but much remains to be done with widespread hunger prevailing amidst food abundance.

FAO is working to better the lot of small and marginal farmers in the region, who form the bulk of the Asia-Pacific agricultural population and are also the poorest and hungriest. FAO is concerned about the sharply declining national and international support to agriculture, which is widening urban-rural disparities, leading to the ever growing influx of impoverished rural people into overcrowded towns and cities.



Food and Agriculture Organization of the United Nations
Regional Office for Asia and the Pacific



17/Oct/2002 THAILAND: LOPBURI MANGO GROWER HONORED ON WORLD FOOD DAY.
A most recognized planter in Phattana Nikhom District, Nonthaburi Province, in central Thailand among the five winners of the 2002 Y.S. Rao Award issued by the FAO Regional Office in Bangkok mark the World Food Day.
Mrs. Ireen Tatong, 51, a mother of four, was an outstanding planter in the Asia-Pacific region together with Mr. Shi Guangyin from China, I. Genevieve Ichiro Rechelbang from Palau, Mr. K.M. Opananda from Sri Lanka and Mrs. Xuan Mai Phan from Viet Nam.
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THAI NEWS SERVICE 17/10/2002

The Nation, Monday, 14 October 2002

World Food Day 2002

Water: source of food security

Asia and the Pacific is home to three-fourths of the world's farming population, yet the water available for farming, on average, is one-sixth of that in the rest of the world. It also has two-thirds of the world's 800 million hungry people.

The theme *Water: source of food security* is meant to heighten awareness of the importance of water in achieving food security. It is a call for the more efficient use of limited supply of water in the face of competing demands from industry and urban consumers. Among other things, this would require reducing waste in large-scale irrigation schemes, agricultural practices suited to uncertain water availability in rainfed areas and appropriate water policies at the national and international level, which in turn must be backed by adequate investment.

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Food and Agriculture Organization of the United Nations
Regional Office for Asia and the Pacific



BANGLADESH

<http://www.dailystarnews.com/200210/17/n2101701.htm#BODY6>
<http://www.nation-online.com/200210/17/n2101701.htm#BODY1>

Use surface water as much as possible: PM (The Daily Star, Bangladesh and the New Nation 17 October)

UNB, Dhaka

Against the backdrop of alarming fall in groundwater level, Prime Minister Khaleda Zia yesterday called for optimum use of surface water in irrigation for the country's sustainable development.

"Like many other countries in the world, the groundwater level in Bangladesh is falling gradually due to excess lifting. It will be beneficial for us if we can ensure the best use of surface water in agricultural work as quickly as possible," she said.

Inaugurating a countrywide programme here marking the **World Food Day 2002**, Khaleda described this year's theme of the day "Water: Source of Food Security" as very timely. Organised by the Agriculture Ministry at the Osmani Memorial Auditorium, the function was addressed, among others, by Agriculture Minister Matiur Rahman Nizami, Food Minister Abdullah Al Noman, State Minister for Agriculture Mirza Fakhru Islam Alamgir and FAO Representative in Bangladesh Bui Thi Lan.

The prime minister recalled that Shaheed President Ziaur Rahman realising this fact had first taken initiative to build up an integrated infrastructure by using surface water for better management of irrigation.

"He (Zia) had launched the programme for canal digging and river dredging, and encouraged the people to dig thousands of kilometres of canals and dredge rivers in remote villages of the country," she told the audience of diplomats, MPs, ministers, government officials and agricultural experts.

Explaining the usefulness of this scheme, Khaleda said water to be held by these canals and rivers in the rainy season would be used during dry season for irrigation.

She said Bangladesh had attained food autarky within a short period of time due to this revolutionary step of Shaheed Zia.

Khaleda said farmers would have to be made aware about soil and water management apart from being encouraged to adopt scientific methods of cultivation.

Turning to the growing population and shortage of arable land in Bangladesh, Khaleda Zia called for producing more food through optimum use of land and adopting modern technology.

"The country's population will hit 17 crore in 2025 when the demand for food will go up to 3 crore metric tons," she said.

The prime minister reminded that there are problems of excess rain, floods, drought and salinity in Bangladesh. "So the challenge to boost food grain output for the increased number of population is very tough, particularly in this adverse situation."

Underlining the importance of bringing qualitative changes in crop production management, the prime minister said more and more lands are needed to be brought under irrigation facility.

"Salt tolerant varieties of crops will have to be cultivated on lands in coastal areas where crop do not grow due to salinity and water logging. We have to apply biotechnology, if necessary," the prime minister said.

"It means we have to ensure the best use of every inch of our land. That's how food security can be ensured," Khaleda told the function.

The prime minister said the country's development activities should be carried on by proper and logical use of natural resources in the interest of the present and future generations.

Referring to the increasing trend of irrigation in agriculture, she said in irrigation 77 per cent of water comes from underground sources while 23 per cent from rivers, canals and ponds.

On the occasion of the **World Food Day**, the prime minister called upon all to get involved in Tele-Food Programme to fight against hunger.

Agriculture Minister Matiur Rahman Nizami said, "We need to boost the country's food production by 15 per cent to meet the increased demand in the year 2025."

He said the demand for water would be 24,370 million cubic metres in the year 2020 when the deficit will be 880 million cubic metres.

PACIFIC

WORLD FOOD DAY: Water for agriculture vital for the future, day stresses

Rome (PINA Nius Online, 13 October 2002) - Wednesday's World Food Day theme, "Water: source of food security", points to the essential role of water in food production, the United Nations Food and Agriculture Organisation (FAO) said. Around the world speakers will highlight the importance of better water management practices in agriculture production. There will be events in more than 150 countries, including in the Pacific.

Each year on the anniversary of its founding, 16 October 1945, the FAO draws attention to the problem of hunger and malnutrition in the world. It highlights crucial issues through World Food Day.

An FAO study of 93 developing countries indicates that some water-scarce nations are already withdrawing water supplies faster than they can be renewed. Ten countries are already in a critical state, it said. Agriculture uses about 70 percent of all freshwater withdrawn from the earth. More and more water will be used for irrigation, as world food production increases to feed a growing population. Water used for agriculture must be managed wisely, the FAO stresses as part of World Food Day. It is among reasons it is joining with the international community to promote the sustainable use and management of water as an essential global resource, it said. - PINA Nius Online.

NEPAL

<http://www.nepalnews.com.np/contents/englishdaily/ktmpost/2002/oct/oct11/features.htm#1>

War against food and water security ('Kathmandu Post' 11 October 2002)

By **KAMALESH ADHIKARI**

The world is in a "race against the clock" in the war against hunger. While hunger is a consequence of poverty, the opposite is also true: Hunger causes poverty. This was the basic reason why the global community celebrated the World Food Day/TeleFood 2001 with the theme "Fight Hunger to Reduce Poverty".

Most notably, World Food Day is celebrated every year on October 16 to commemorate the founding of the United Nations Food and Agriculture Organisation (FAO) in 1945. First observed in 1981, each year World Food Day highlights a particular theme on which to focus activities. While the theme for 2000 was "A Millennium Free from Hunger", themes for the previous two years were: "Youth Against Hunger" (1999) and "Women Feed the World" (1998).

The World Food Day is important for two main reasons. First, it aims to heighten public awareness of the plight of the world's hungry and malnourished. Second, it encourages people worldwide to take action against hunger. More than 150 countries observe this event every year.

Currently, more than 800 million people do not have enough food and freshwater to eat and drink. Despite the global pledge made during the World Food Summit in November 1996 in Rome, Italy to halve the number of undernourished people and eventually to achieve food security for all by 2015, the prognosis, as was expected, does not look promising.

The target made is not on progress and the governments are not getting "on track" in reducing hunger. Moreover, according to FAO estimates, since the world will require 60 percent more food by 2030, the situation might become even more pathetic in the years ahead if precautions and necessary rectification in the policies are not immediately taken or implemented.

Against this backdrop, the World Food Day/TeleFood theme for this year is "Water: Source of Food Security". This theme recognises the essential role of freshwater in feeding the global population and ensuring food security - having regular access to enough high-quality food to lead active, healthy lives. Water covers three-quarters of the Earth, but only a small fraction is accessible as freshwater. Limited access to water is increasingly becoming a constraint in producing enough food and thereby in ensuring food security. Of the total amount of water withdrawn, agriculture claims almost 70 percent to produce the food that fuels human activity. According to a study conducted by FAO in 93 developing countries, the situation of water scarcity is severe to such an extent that a number of nations are already withdrawing water supplies faster than they can be renewed. Ten countries are in such a critical state that they withdraw more than 40 percent of their total water resources for agriculture and another eight are water stressed, withdrawing more than 20 percent. At the same time, the competition for water from industrial and domestic users is continuing to grow, posing other serious threats to the livelihoods of the people.

And, most dangerously, the severity of water problem in the world is not merely to do with scarcity. It deals with access to and quality of water as well. Even if water is plentiful, access to it is not always equitable, and quality of it is not always hygienic. For example, take the case of women, who represent the majority of the developing world's farmers, but are often excluded by tradition from owning land and managing water. Even in the context of Nepalese women, they are used up in farming on a larger scale but they are in most cases excluded from owning land and managing water.

Similarly, though immensely rich in water resources, the country has not been able to provide adequate drinking water and sanitation facilities to a vast majority of its population. Due to the lack of quality of water, people here often suffer from different waterborne diseases. Some 44,000 children under the age of five die every year from such diseases. With these reasons, the target to reduce the number of undernourished to half by 2015 is not merely tough but it also looks impossible.

The choice of this year's World Food Day/TeleFood theme has therefore been centered on the **role of freshwater in food security**. This year's theme serves as a call to governments, civil society and the international community to realise the importance of water in securing food for all. This day can be taken as a reflection of the global concern, regarding the gap between the requirements and the availability of water in most parts of the world. In the United States alone, 450 national, private voluntary organisations sponsor World Food Day, and local groups are active in almost every community. Similarly, another initiative is the TeleFood Campaign, in which television and radio broadcasts, concerts, celebrity appeals, sporting and other events pass on the message that it is time to fight against hunger.

Therefore, for Nepal also, it is urgent to give full recognition to the need of solving the water problem on a national scale. While international cooperation and commensurate resources are essential to prevent the present global water crisis from becoming a source of dangerous friction in the years ahead, the Nepalese government itself should also be more planned and organised in launching programmes to prevent water crisis in the country and thereby to ensure food security.

It definitely needs renewed political will and commitment from the government. Likewise, equally important roles will be of the international and national non-governmental organisations, other grassroots level organisations, educational institutions and media. Citizens of the country should also realise that they do also have a key role to play in managing sustainable use of water and ensuring food security in the country. Hope this year's World Food Day will contribute to a large extent in highlighting the importance of freshwater as a source of food security, not only in the country but also in other countries of the world, which are suffering from acute hunger and malnutrition.

INDIA

<http://www.hinduonnet.com/thehindu/2002/10/19/stories/2002101900561000.htm>

Global food insecurity (Editorial in The Hindu, October 19 2002)

MUCH HAS BEEN said during 2002 about a new global effort to accelerate sustainable development. At the Financing for Development conference and at the World Summit on Sustainable Development, two high level United Nations conferences that were held earlier this year, agendas were adopted and declarations were issued on a new partnership between rich and poor countries that would take the world to the Millennium Development Goals on poverty, health, education and gender equality. But now we have a U.N. agency, the Food and Agriculture Organisation, issuing a warning that the world will not meet the first and most basic of goals - of halving by the 2015 the population suffering from chronic hunger.

The FAO warns, in its grimly titled report, State of Food Insecurity, that there are now 799 million people in the developing countries suffering from under-nourishment. The latest estimates show a 20 million decline between 1990-92 and 1998-2000 in the number afflicted by malnutrition, but this is far too slow a fall in the scale of chronic hunger in the world. The imperceptible progress that has been made in the war against global hunger since the early 1990s means that from now onwards, every year as many as 24 million people have to be lifted out of hunger (compared to the recent record of just 2.5 million a year) in order to achieve the 2015 target of just 400 million people coping with under-nourishment. Clearly, notwithstanding all the brave words spoken by the leaders of the world, the global fight against hunger is in urgent need of a much stronger thrust. If a reduction in the spread of under-nourishment is proving so hard to bring about, elimination of hunger must be a goal that keeps getting pushed further and further into the future. It is also worrying that what little progress has been made has been concentrated in a few countries - mainly China and six other nations in Asia and Africa. In the vast majority of developing countries, there is a slackening in the efforts to reduce malnutrition. Sadly, India is one country where even as there has been a small decline in the proportion of people experiencing under-nourishment (from 25 to 24 per cent between 1990-92 and 1998-2000), the absolute number has grown by as much as 18 million. This is consistent with the Indian development experience during the 1990s, when in spite of a fairly rapid growth in average per capita incomes, widening regional disparities have meant that the absolute number of people suffering from chronic hunger has increased.

It is not that the Governments of the developing countries do not know what needs to be done to make a major dent in this the most basic of problems afflicting the human condition. The agenda for action has been known for decades. What stands in the way is a combination of factors that includes Governments without political will, an unfavourable global environment and wrong priorities that get reflected in a paucity of resources. For Governments that care to listen, the FAO has listed once more all the elements of an age-old package. Since chronic hunger remains predominantly a rural phenomenon, land reform is as relevant today as it was decades ago. The FAO report shows once again, if evidence was needed, that no country has succeeded very much in lowering malnutrition without first implementing land reform. The other elements of the package include higher investment in rural infrastructure, restoration of degraded farmland, improved agricultural research and extension services and diversification of rural income. The FAO lists its familiar five-point programme which would cost the world \$24 billion a year for achieving a dramatic reduction in the scale of under-nourishment. This may seem like an impossibly large amount in an era when few developed countries put their money alongside their lofty proclamations. But a monetary cost cannot be attached to reducing global hunger, the reduction - if not elimination - of which must be the first and foremost task of the international community.

THAILAND

17/Oct/2002 THAILAND: LOPBURI MANGO GROWER HONORED ON WORLD FOOD DAY.

A most recognized planter in Phattana Nikhom District, Nonthaburi Province, in central Thailand was among the five winners of the 2002 Y.S. Rao Award issued by the FAO Regional Office in Bangkok to mark the World Food Day.

Mrs. Ireen Tatong, 51, a mother of four, was cited outstanding planter in the Asia-Pacific region, together with Mr. Shi Guangyin from China, Mrs. Genevieve Ichiro Rechelbang from Palau, Mr. K.M. Opananda from Sri Lanka and Mrs. Xuan Mai Phan Thi from Viet Nam.

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THAI NEWS SERVICE 17/10/2002

VIET NAM

VIETNAMESE WOMAN FARMER WINS AGRICULTURE AWARD Bangkok, Oct. 15 (VNA) —

A Vietnamese woman farmer was among five outstanding farmers in the Asia-Pacific region receiving the Food and Agriculture Organisation's 2002 Y.S. Rao Award for their excellent contributions to agricultural production. Phan Thi Xuan Mai, 39, living in hamlet 1, Tan My commune, Cai Be district in Tien Giang southern province, was able to double her rice yield to more than seven tonnes per hectare in the winter-spring crop and to four-five tonnes per hectare in the two remaining crops of the year. The four other award-winning farmers were from China, Palau, Sri Lanka, and Thailand. The award presentation ceremony was held in Bangkok on Oct. 14 to mark the World Food Day.—Enditem

SRI LANKA

<http://origin.dailynews.lk/2002/10/16/new18.html>

World Food Day today : Emphasis on water for food security (Daily News Sri Lanka 16 October)

Agriculture and Livestock Minister S.B. Dissanayake has congratulated the UN Director General and his representatives the world over for their efforts to fulfil the mission taken up by the Food and Agriculture Organisation (FAO) in a **World Food Day** message. The Minister has said the FAO has taken up the unique mission of freeing mankind from hunger and poverty. The World Food Day commemorates the founding of the FAO.

The theme for this year "Water : Source of Food Security" is an extremely timely theme given the growing necessity to manage water which is an essential input for agricultural production.

Access to safe and nutritious food is the first fundamental human right. Policies of all governments strived towards achieving increased food production, access to food and a better livelihood for the farmers of this country.

The political will and commitment of our Government is to achieve food security for all in our country. On this day which is dedicated to renew our pledge of ensuring food security, " the message said

<http://origin.dailynews.lk/2002/10/16/new28.html>

World Food Day celebrations by NGOs (Daily News 16 October)

by Galewela group correspondent

Many Non Governmental Organizations operating throughout the island have made arrangements to celebrate the **World Food Day** on October 16 highlighting the theme for this year 'Water: Source of Food Security', designated by 'Food and Agriculture Organization' (FAO). Colombo FAO office has allocated some money to National NGO Council of Sri Lanka (NNGOC) and its Board of Directors met on October 10 and decided to distribute this money among its affiliated NGOs who offered to celebrate the World Food Day - 2002. Girl Guides' Association and Sri Lanka Youth Council will conduct a programme in Colombo.

Wilpotha Women's Thrift Association, Talawa 'Samasewaya', Hatton 'Nawayugaya', Social Development Forum, 'Projects For The Youth' Matara, Hambantota 'Women's Development Foundation', Puttalam 'Community Trust Fund', 'Sawiya', 'Gemi Jana Pubuduwa', and 'Uwa Farmers' Organization Badulla have notified their programmes scheduled to be implemented today 16.

'United Schools Organization Sri Lanka' in collaboration with 'The Agriculture Science Society' of Galewela Central College has rescheduled its programme for October 18 to avoid clashing with Colombo celebrations.

Mazlan Jusoh FAO Resident Representative for Sri Lanka and Maldives will attend the 'World Food Day' programme to be conducted at Hector Kobbekaduwa Agriculture Training and Research Institute, Colombo and FAO Programme Officer R. M. Ranasinghe and NNGOC Chairman Saman Amarasinghe will be the chief invitees at Galewela Celebrations on October 18.

Several Farmers' Organizations receiving 'World Food Aid' also have come forward to fall in line with the international farmers to celebrate this world event.

Yatiwehera Lenawala 'Sri Sarana' and Kamarawa Kudumiriyaya farmers' organizations have made arrangements to engage in practical work to improve their tanks on October 18 to mark the World Food Day.

PAKISTAN

<http://paknews.com/top.php?id=1&date1=2002-10-16>

Water a precious commodity: Musharraf (Pakistan Daily, 17 Oct)

ISLAMABAD: Oct 16 (PNS) - President General Pervez Musharraf Tuesday said that water was a precious commodity for Pakistan. The water irrigating much of Pakistan's Punjab and a life-line for agriculture and live stockflows from Kashmir. The Indus Water treaty has been the framework of water sharing between Pakistan and India. Without Kashmir waters, the entire Pakistan is likely to turn into a barren desert.

In his message on the occasion of **World Food Day**, Musharraf said: "I am pleased to note that World Food Day is being observed today with a most apt theme 'Water, Source of Food Security' in light of the present global scenario of food insecurity and poverty. Water is a precious and finite resource. Although it covers three quarters of the earth only a small fraction of this resource is accessible as freshwater, of which about 70 percent is used to produce food. In Pakistan, water is most precious with intense competition between agricultural, industrial and domestic consumers on its use. With a growing population and developing economy, Pakistan's demand for water is ever increasing. Unfortunately, over the years, no effort was made to augment the country's existing water reservoirs, which have depleted due to silting and other factors. Protracted drought and desertification over the past few years have further impacted this precious resource.

I am proud to state that the Government in a brief period has taken a number of short, medium and long-term measures to address the issue of water shortage in the country. A comprehensive programme for expanding storages through environmentally safe and sustainable approaches has been launched. Alternate technologies are being explored not only to derive maximum benefits from all the available water resources but also to reduce the negative effects of excessive use of irrigation water on soil and the environment. Despite the severest of droughts, with the benevolence of Allah and appropriate policy reforms, we have been able not only to achieve self-sufficiency in our main food grain, wheat, but also to export sizable quantities of it. Pakistan feels a strong bond with other members of the world community in the common goal of reducing poverty and hunger in the world. We are bound to share our know-how and resources with other states in working towards the achievement of this common goal to which we have jointly committed in the declarations of the World Food Summit of 1998 and the follow up World Food Summit of June 2002.

On the occasion of the World Food Day, let us renew our commitment to provide an enabling environment for food security of the poor and vulnerable segments of our society. We also pledge to support all international efforts to eliminate hunger and malnutrition from the world."

List of guests

The following is a list of selected guests who attended the regional observance of World Food Day at the FAO Regional Office for Asia and the Pacific on 14th October 2002

Guest of Honour

HE Sora-at Klinpratoom, Minister of Agriculture and Cooperatives, Thailand

Guest speaker

Y.K. Alagh, Vice-Chairperson, Sardar Patel Institute of Economic and Social Research, India

Outstanding farmers

Shi Guangyin, agroforester, China

Genevieve Ichiro Rechelbang (Mrs), marine fisher, Palau

K. M. Opananda, plantation farmer, Sri Lanka

Ireen Tatong (Mrs), fruit farmer, Thailand

Xuan Mai Phan Thi (Mrs), rice farmer, Vietnam

Office of the Royal Development Projects Board

Somsong Rungroengsilpa (Mrs), Director of the Computer Center

Royal Thai Government

Ministry of Agriculture and Cooperatives

Petipong Phungbun Na Ayudhya, Permanent Secretary

Chaiwat Prechavit, Inspector General

Chavalvut Chainuvati, Director-General, Cooperative Promotion Department

Pongpen Summapan (Ms), Director-General, Office of the Rubber Replanting Aid Fund

Thammarong Prakobboon, Director-General, Department of Fisheries

Preecha Petchmala, Deputy Director-General, Office of the Rubber Replanting Aid Fund

Poungpit Dulayapach (Ms), Deputy-Director General, Agricultural Administrative Development Div

Monthip Krachangvej (Ms), Director, Agro-Tourism Division

Payao Rattanaviboon (Ms), Director, Agribusiness Promotion Division

Pinit Korsieporn, Director, Foreign Agricultural Relations Division

Vachara Boonchuseth, Director, Fish Marketing Organization

Arunee Pintrayong (Mrs), Subject Matter Specialist, Department of Agricultural Extension

Ngomchuen Kongseree (Ms), Senior Expert in Rice, Department of Agriculture

Apiradee Prasertsuk (Ms), Chief Internal Audit Subdivision, Office of the Rubber Replanting Aid Fund

Kasem Prasootsaengchan, Chief of FAO section, Foreign Agricultural Relations Division

Sunisa Boonypatipark (Ms), Chief, Foreign Relations Branch, Planning Division

Benjarut Paelai (Ms), Foreign Agricultural Relations Division

Chompunuch Kanasoot (Ms), Foreign Agricultural Relations Division

Prachuab Lewchalermvong (Ms), Foreign Agricultural Relations Division

Ministry of Foreign Affairs

Laxanachantorn Laohaphan (Mrs), Deputy Permanent Secretary
Pradap Pibulsonggram, Director-General, Department of Technical & Economic Cooperation (DTEC)
Phenchome Incharoensak (Mrs), Deputy Director-General, International Organizations Department
Wichai Vongsakul, Information Division

Universities and academic institutions

Birasak Varasundharosodth, Governor, Thailand Institute of Scientific and Technological Research (TISTR)
Songsak Srianujata, Director, Institute of Nutrition, Mahidol University at Salaya
Tharmasak Sammartya, Dean, Faculty of Agriculture, Kasetsart University
Somporn Duanjai, Dean, Faculty of Technology Agriculture, Rajabhat Institute Ubonratchathani
Sittichai Kasetkasem, Head of Rural Studies Center, Kasetsart University Research & Development Institute
Athapol Noomhorm, Processing Technology Program Professor, Asian Institute of Technology (AIT)

The Food and Drug Administration (FDA)

Vichai Chokevivat, Secretary-General

Non-governmental organizations and associations

Chandra Pitrachat (Ms), Board Member and Treasurer, Chairman, International Relations, Distance Learning Foundation
Sorada Duke, Member (Mrs), Board of Foreign Relations, Distance Learning Foundation
Rosarin Smitabhindu (Ms), Assistant Director of the Royal Chitralada Projects

Embassies

Bangladesh	HE Hemayet Uddin, Ambassador
Belgium	Andre Laurent, Commercial Counsellor
Cambodia	Ung Teaseam, Counsellor
Canada	Alan Lebr, First Secretary (Development)
France	Philippe Letrilliart, First Secretary
India	HE L.K. Ponappa (Mrs), Ambassador
Indonesia	Representative
Israel	Edward Shapira, Deputy Chief of Mission
Japan	Yoshitake T., Representative
Lao	Vansy Viliyaphone (Miss), First Secretary
Mongolia	HE Luvsandorj Dawagiv, Ambassador
Nepal	HE Janak Bahadur Singh, Ambassador
Sri Lanka	HE S. Palihakkara, Ambassador
Vietnam	Nguyen Hong Cuong, Minister-Counsellor & Deputy Head of Mission
CEC	HE Klauspeter Schmallenbach, Ambassador - Head of Delegation

United Nations

ESCAP	Kim Hak-Su, UN Under Secretary-General and Executive Secretary
IBRD	Patchamuthu Illangovan, Senior Environmental Specialist
UNEP	Per Sorensen, Programme Officer
UNICEF	Teresa H. Stuart, Representative
UNIS	Kittisak Vardhanabhuti, Associate Information Officer
WFP	Kenro Oshidari, Regional Director A.I.



FD 2002 organizing secretariat

Steering committee

Changchui He, Regional Representative (Chairperson)
 Dong Qingsong, Deputy Regional Representative
 N.M. Hla, Chief, Management Support Unit
 K. Siegert, Water Resources Development and Conservation Officer
 Sri Limpichati (Mrs), Consultant
 D. de Vleeschauwer, Information Officer (Secretary)

Organizing committees

Invitations, reception and protocol

Dong Qingsong/N.M. Hla, Chairpersons
 D. de Vleeschauwer
 Kanokporn Chansomritkul (Ms)
 Kanjerat Boonyamanop (Ms)
 Monpilai Youyen (Ms)
 Praphas Weerapat
 Nawarat Chalermkao (Ms)
 Navaporn Liangchevasuntorn (Ms)
 Kallaya Meechantra (Ms)
 Chotika Na Chiangmai (Ms)
 Thnomkwan Rachtachart (Ms)
 Kasarin Sirisoondhornpaibul (Ms)
 Rangrong Sodamak (Ms)
 Chanrit Uawongkun
 Tess Rattana-Areeyagon (Ms)
 Jaruwan Thananimit (Ms)
 Phavinee Tithipan (Ms)
 Bongkoch Prasanakarn (Ms)
 Aruneeprapa Peansanong (Ms)
 Parichat Chuntaketta (Ms)
 Pawadee Chok-oon-kit (Ms)
 Jintana Anunacha (Ms)
 Duangporn Sritulanondh (Ms)
 Kanerng Kamuthavanich
 Sunee Hormjunya (Ms)
 Thamrongsak Techatadakul
 Pannee Sophannakorn (Ms)
 Jaruwan Thananimit (Ms)
 Suthep Rakpanyakaew
 Vishnu Songkitti (MC)

Officers for the outstanding farmers:

Dai Weidong (China), M. Hazelman (Palau),
 Praneet Gunatilaka (Sri Lanka), Praphas Weerapat
 (Thailand), D. Salvini (Vietnam)

Liaison with Thai government

Dong Qingsong/D. de Vleeschauwer, Chairpersons
 Sri Limpichati (Mrs)
 Praphas Weerapat

Logistics

N.M. Hla, Chairperson
 Pravet Awachanakarn
 Wichai Nomkhumtode
 Cristina Sriratana
 Pensri Yujang (Ms)
 Prasert Huatsawat

Catering

Limpichati (Mrs), Chairperson
 Chainarong Palaprasert

Media, publications and photographs

D. de Vleeschauwer, Chairperson
 Apinya Petcharat (Ms)
 Kanokporn Chansomritkul (Ms)
 Prayoon Amar
 Mahesh Uniyal (consultant)
 Kanjana Sutthisirimongkhon (consultant)

List of publications distributed

- ◆ 2002 WFD information note
- ◆ 2002 WFD issues paper
- ◆ 2002 WFD poster
- ◆ *The alliance against hunger* leaflet
- ◆ Brochure *FAO at work*
- ◆ RAP publication *FAO in Asia and the Pacific. Annual report 2001*
- ◆ RAP publication *Selected indicators of food and agriculture development in the Asia-Pacific region, 1991-2001*
- ◆ RAP newsletter *Maliwan* (July-September 2002 issue)
- ◆ Address by the guest of honour
- ◆ Welcome and introductory remarks by RR
- ◆ Keynote address by Alagh Yoginder Kumar
- ◆ Other: citations of outstanding farmers

FAO on the web: <http://www.fao.org>
RAP on the web: <http://www.fao.or.th>

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