

Asia's Rural Poor Deserve Better Deal

by Peyton Johnson

SINCE becoming FAO's ranking officer in Asia and the Pacific in January, 1991, it is not only poetry that has occupied Mr AZM Obaidullah Khan (a Bangladeshi national and a poet) thoughts, but the region's myriad development problems, especially those of the rural poor, the people whom he calls, "Asia's Growing Army of Discontent."

"Some of our problems are new. Others are as old as Asia itself. Both sets, however, are becoming more urgent. We need fresh thinking and new initiatives to deal with them while there is still time," he said. Report after report, many from FAO itself, spell out just how serious these problems are.

"The environmental crisis alone is a grim threat to our region," says Mr Khan. "It threatens such vital life-sustaining activities as forestry, energy generation, water use and distribution, both inland and marine fisheries, and of course agriculture, the economic backbone of practically all Asian developing countries."

The environmental crisis threatens Asia and the Pacific more than it does any other region, Mr Khan says, for at least two reasons: the region houses almost 60 per cent of all humanity, and above 70 per cent of the world's farming households, the vast majority, progress notwithstanding, still dirt poor.

"Our land-man ratio is the planet's lowest and most precarious, with a dangerously low .27 hectares of farmable land available per person as compared to a world average of 1.64 hectares, six times greater than ours," Mr Khan added.

With 60 per cent of the global population yet only 28 per cent of the world's arable lands, the region will find it harder and harder to feed its present and still rapidly growing population. Moreover, Mr Khan continued, as most Asia societies are ancient and their farm lands already tired and overstrained, there is scant possibility of bringing new lands under the plough.

"What new lands?" he asked. "There are no new lands left. We used them up long ago. Our only hope is to raise yields dramatically. We have the technology, but so far little, far too little, has been done."

Continued runaway population growth, despite considerable success in slowing it in several countries, further complicates the already precarious man-land ratio and the growing environmental problems. It also complicates all



A. Z. M. Obaidullah Khan

other problems in the vast region.

"If we cannot stabilize our populations at some reasonable level," Mr Khan said, "it is going to be extremely difficult to raise the living standards of our peoples, especially our tens of million of rural poor."

Another environmental fact that Mr Khan believes cannot be stated too often is that in the long run there can be no healthy Asian agriculture without healthy Asian forests.

"They are as linked as Siamese twins," he said. "Kill the forests, the watersheds of all farmlands everywhere, and agriculture dies soon afterward."

Yet it is the ruthless rape of the forests, "deforestation" of whatever origin, that is one of main contributing factors to the so-called "greenhouse effect," a rise in the earth's temperature caused by the release into the atmosphere of higher and higher levels of carbon dioxide. The greenhouse effect in turn is the main contributor

to yet another grim environmental menace — "global warming."

The global warming trend, whose likely effects are still hotly debated among scientists, is no longer theory. The planet's temperature is indeed rising. If present environmental deterioration continues, the scientists say, the greenhouse gases will double by the year 2030, raising the temperature of the earth's surface by at least 1.5 to as much as 4.5 degrees Celsius. This will raise sea levels considerably and could mean catastrophe for many nations.

"A large part of Bangladesh would be inundated and the Maldives might disappear beneath the Indian Ocean," Mr Khan said. "About 40 per cent of the entire regional population lives only a few kilometres from the sea. These coastal millions will be the first and hardest hit. And yet other than talk, we have done precious little to face up to such a horrendous possibility."

Nor will inland rural communities be spared, according to Mr Khan. Despite significant increases in irrigation over the past quarter century, he pointed out, about 70 per cent of the regions farms are still rain fed, tilled by families already tragically poor. Their soils are low in fertility and highly prone to wind and water erosion.

"Our drylands give yields of a third or less of the irrigated areas. Yet this is where the bulk of our truly poor live. Their lot is already cruel. Further global warming will make it far worse. Many, perhaps a majority, could actually starve. Unless we act both wisely and soon we could face calamity on a scale that will make the recurrent Indian and Chinese famines of past centuries seem mere irritations," Mr Khan said.

The indispensable first step in slowing global warming and to protect the regions, and the world's fragile ecology, Mr Khan said, is to save what is left of the forests and plant vast new ones.

"We must plant millions of not merely trees, but millions

of hectares of trees," says Mr Khan. "The job is far too big for individual governments alone. It must be faced on an international basis. The colossal amount of labour required can only be furnished by the people themselves."

There is no other labour force in the region, or in the world, large enough to take on the job with any hope of success. If we cannot get the rural people involved, the battle is lost," Mr Khan says.

Yet another problem, once thought to be merely temporary but which now seems intractable, is equity in development or, perhaps more accurately, a more just sharing of the region's wealth, old or new.

The gap between the wealthy and the poverty-stricken many is not just still there. It is widening every year. While the percentage of national income that goes to the already rich soars higher and higher every year, the poor's pathetic percentage plunges lower and lower.

"Now we have such anomalies as hunger amidst plenty, the increasingly visible spread of vast human misery along side the equally visible, offensively visible I might add, spread of vast wealth and vulgar ostentation."

This is a dangerous sign in any society," Mr Khan said. "It says clearly that not only is such a society lacking in social justice, it is lacking in development as well — if you mean by development a better life for the entire people and not merely selfish minorities."

All these problems are of a piece. They are intimately related to one another and you cannot really solve one without at the same time addressing the others. This will require new thinking and new initiatives on an international as well as a purely regional or nation scale, Mr Khan added.

This may well require more pragmatism and political sagacity and good will than nations normally show, Mr Khan conceded. But time is running out.

Unending Battle to Save Forests

DESPITE sustained efforts and public concern, the rate of deforestation in Asia and the Pacific more than doubled during the Eighties, rising to an average 4.7 million hectares a year, against two million a year the previous decade.

Figures released by the Food and Agriculture Organization of the United Nations (FAO) show that South Asia lost 1.7 million hectares of forests in the Eighties, while continental and Southeast Asia lost 1.4 million, and insular South East Asia lost 1.6 million.

Countries with the most pronounced forest losses were India, Indonesia, Myanmar, the Philippines, Thailand and Vietnam.

The past decade's losses have prompted FAO Director-General Edouard Saouma to warn that deforestation "now threatens the region's ability to produce enough food to feed its growing populations."

The phenomenon, he added, also "threatens (Asia's) environment and its delicate ecological balance."

The desperate forestry situation of the region and the globe was taken up in Paris last year by the 10th World Forestry Congress, which was attended by 3,000 experts from 160 countries and 100 international organisations.

Concern over forest losses and their effect on environmental stability, led FAO to select "Trees for Life" as the theme for World Food Day 1991, the anniversary of its organisation's establishment in Quebec City, Canada, on October 16, 1945.

Concern over deforestation is backed up by hard facts. Asia and the Pacific, for instance, is already faced with an extremely precarious "man-land" ratio, which is progressively deteriorating. With 93 per cent of its 500 million arable hectares under cultivation, little "new" land is available for

farming in the more densely populated countries there is none at all.

With a region-wide population already totalling 2.8 billion, for about 56 per cent of the entire human race — and expected to reach 3.2 billion

affected by drought, mineral stress, deficiency of plant nutrients, shallow top soil, salinity or waterlogging. If farmlands are to recover from these handicaps they need an improved environment. Deforestation has just the opposite

carried out on a wide scale, if at all.

Despite the bleak assessments of the FAO, environment and conservation groups and increasingly by governments themselves, not all the forestry news coming from the East is bad.

Reforestation, all but unknown 20 years ago, is now regreening some three million hectares a year throughout the region.

China alone has planted 31 million hectares of new plantations over the past 15 years, increasing its tree cover from 8.6 to 13 per cent of its land mass.

India reforested 16 million hectares between 1951 and 1991. By 1988, Indonesia had established 1.44 million hectares of timber plantations, while 5.8 million hectares of marginal lands had been "regreened" and 1.2 million had been reforested.

In the Malaysian peninsula, some 38,000 hectares had been planted with tropical pines and fast-growing hardwood species by the end of 1988.

In South Korea, from 1986 to 1988, some 48,000 hectares were planted every year. And in the past decade, Sri Lanka planted more than 170,000 hectares of new forests.

Thailand, meanwhile, has established about a half-million hectares of plantations over the past 30 years — far less than what the country needs but far more than it ever planted before.

If forestry policies are to become more effective agents of just social change, the study adds, "there can be no successful forestry development unless the people themselves are made the centrepiece. People's participation is the key. Only with the help of the people can deforestation be turned back. Only with the help of the people can our lands again be made green." — Cemri News



Cranes deposit pine logs at Indonesia's biggest pulp and paper mill in North Sumatra

by the year 2000 — Asia and the Pacific faces a many-sided environmental crisis of major proportions.

Most Asian farmland, for example, has been under the plough for centuries. According to a map produced by FAO and the United Nations Educational, Scientific and Cultural Organisation (UNESCO), only 14-18 per cent of the region's soils are without serious limitations and suitable for agricultural production on a sustained basis.

By contrast, more than 80 per cent of the soils are af-

fect.

"The harmful effects of deforestation," says Saouma, "are as complicated and far-reaching as they are immediate and many-sided. One cannot afford the luxury of underestimating or ignoring deforestation's present and future menace."

Bangladesh, for instance, faces flooding disasters almost every monsoon season. Sensible watershed management, systematic plantations on hillslopes and the like could help mitigate these calamities. But so far too few of these measures have been

Man and Wood

A Fascinating Exhibition

by Victoire Jean

THE originality of the exhibition "Bois a Coeur Ouvert" lies in the museum's new openness towards modernity. It combines its scholarly knowledge of the past with the more active and concrete knowledge of industrialists and professionals from the wood sector, working together with the Tropical Forestry Technical Centre and the Wood and Furniture Centre.

This close cooperation takes us on a walk through wood. The white wood of the poplar, the red wood of rosewood, the yellow wood of the movinguia, two-tone woods, and the black of ebony, uniformly coloured, all have growth rings right inside their trunks, beneath the bark.

These rings increase every year and tell us the story of the life of the tree, its age, the growth rate and even the history of the place that the tree has grown in. An analysis of each concentric layer reveals, for instance, the periods of drought or of excessive humidity which they lived through.

The specimens presented in the exhibition, from the fragment of a fossil, a timeless sculpture from a petrified forest in Amazonia, to the multiple cross-sections showing the delicate anatomy, remind us that their existence goes back nearly 356 million years.

As soon as man appeared on earth, he made the tree the indispensable ally for his survival. Wood became his inseparable

everyday companion, his source of heat, his means of subsistence, of defence and his shelter.

With time, man grew to know wood better, to distinguish the different species surrounding him and to adapt it to the needs of his time.

As a prime necessity, just like man, wood was going to become polished and refined.

Vestiges of an extinct plant life, the statues on Easter Island are also there in memory of Tahunga, the magic sculptor, who was able to give shape and life to the "wood of blood", the colour of the saphora toromiro, a little legendary tree, the last specimen of which became extinct around 1960.

This is borne out by the skill of the Egyptians with the sarcophagus, which is a painstaking and artistic assembly of pieces of wood.

Wood has its prestige in the modern era in the form of the violin, the symbol of the perfect, subtle harmony of form and sound, a combination of maple and spruce from which, thanks to its strings, timeless notes will drift forth.

Today, that same familiar and warm wood surrounds us in our everyday lives, combining usefulness with beauty in an often natural way, for instance in furniture.

In the future, it will continue on its way to meet other demands. To meet the requirements of the economy, its could be transformed into new



materials having different qualities suited to the development of the industrial civilisation.

So, for thousands of years, man and trees have continued their adventure. It is an everlasting adventure so long as

man remains man and stays aware of his initial mission: to preserve his friend wood from the ills lying in wait for it, by all the means he has at his disposal. Therein lies the least sign of respect that he owes it.

Costa Rica's Prototype for a Greener World

by Olga Sheean-Stone

IN a bid to save Costa Rica's rapidly shrinking forests, one of Central America's most ambitious management plans has been devised, after more than a decade of consultation and research.

The plan, dubbed "Osa 2000", has been developed as part of BOSCOA, a five-year forestry conservation and development project administered by Costa Rica's Neotropica Foundation, with technical assistance from WWF.

Selected as a test case for what Costa Rica's President, Rafael Angel Calderon, calls "a new international ecological order", the plan is emerging as a prototype for sustainable resource management in the tropics.

Osa 2000 focuses on the Osa Peninsula of southern Costa Rica, which contains the richest expanse of jungle remaining on Central America's Pacific coast. At the core of the Osa's forests — being devoured faster than any other tropical forest in Central America — lies Corcovado National Park. It is considered the "jewel of Costa Rica's protected area system."

With support from Osa 2000, the Neotropica Foundation has established a

permanent non-governmental centre called the Centre BOSCOA, for training, research and extension activities.

The centre, located in Agua Buena, 400km from the capital of San Jose, is devoted to improving the living conditions of the Osa "campesino" (peasants). It works directly with nine local organizations representing some 430 families or 2,500 people. The Ministry of Natural Resources, Energy and Mines (MIRENEM) also works closely with the BOSCOA team.

This collaboration between BOSCOA's technical field staff and new and dynamic government officials represents what WWF technical consultant, Richard Donovan, calls "a rare combination of bottom-up grassroots development with complementary top-down policy directives."

The concept of preserving the Osa is based on one very simple objective. The local people must have alternatives to the indiscriminate and wholesale destruction of their natural environment. The people themselves must be technically able — and willing — to implement these alternatives.

"All our energy will be devoted towards working with the Osa communities, to help

them adapt to new methods of sustainable resource management," said Costa Rican Jose Joaquin Campos, Director of the BOSCOA project. "We are designing incentives for these groups, including the establishment of local, forest-based, industries, which will provide increased revenue to the local people."

From the beginning, local communities have been closely involved in the formulation and implementation of Osa 2000. Existing local agencies, organizations and social structures have been respected and utilized in the process. Most importantly, BOSCOA has concentrated on providing technical assistance to "campesinos", and training local leaders in fund-raising and other management skills. Direct financial support has been minimal.

At the core of OSA 2000 is the Community and Family Rainforest Programme. This programme involves the creation of a system of privately-managed forests, incorporating long-term forest management agreements for the forest and land tenure concessions from the Costa Rican Government.

"Our goal is to have 20,000ha of forest under sustainable management within the next three years," said Mr

Campos. Already, some 880ha are being managed sustainably as part of the first stage in this revolutionary programme.

Under Osa 2000, technical assistance is being provided to forest landowners for the development of their own management plans. These plans will define the multiple uses of forest, including sustainable exploitation of wood products, ornamental plants or wildlife, native species reforestation and agroforestry.

A typical 'family rainforest' consists of a small block of forest managed through a regional organization such as Coope Agro Muebles — a local cooperative receiving technical assistance from BOSCOA for the manufacture of wooden furniture using sustainably-produced timber. Families live and farm in the clearings around the forest block, where they practise multiple-use sustainable forestry.

Most family rainforests will be grouped into larger units called community rainforests. These tracts of forest will eventually be consolidated into a forested belt which will surround Corcovado National Park, forming a secure and sustainably-managed buffer zone.

Plant Life Flourishes Near the Equator



It is believed that flowers and vegetables do not flourish in the Equator. Yet on Gan Island, Maldives — a little south of the Equator — seeds have been imported, water pumped in, and sheds of straw made. Flowers and vegetables of several varieties then flourished as they do in the Tropics. The numerous snails had to be killed by dunking them in salt water, while manure was flown in from nearby Colombo, Sri Lanka. Mosquitoes, flies, and other pests had to be combated with electric light at night, and insecticide and pesticides by day.

