Appropriate Disaster Management in Bangladesh

Thoughts on Actions by Government and Donors

by Muhammad Saidur Rahman

Since the worst cyclone of November 1970, we have lost over half a million lives. Let's not wait for another

severe disaster to activate ourselves to think of the most appropriate and cost-effective approach

to disaster management in Bangladesh. The key actors should ACT, and NOW.

N November 12, 1970, a severe cyclonic storm with hurricane intensity struck the coastal belt and the off-shore islands of Bangladesh killing over 300,000 people and causing colossal damage to infrastructures., property and crops. It was the worst in the recorded history of the world. As per the record of the Government of Bangladesh, 138,000 people lost their lives in the cyclone that hit the south-east coast of Chittagong on April 28, 1991. Should a cyclone of the similar nature strike the coast now, I am afraid the damage to lives and property would not be signifi-

cantly less. Since 1993, after conducting a nine-month study for the preparation and publication of a Disaster Management Handbook for Bangladesh, we are crying and urging for appropriate, low cost and effective disaster management practices but to no substantial effect.

Needless to mention that Bangladesh is a disaster prone country. Every year we are affected by one or more than one of the disasters e.g. cyclone. flood, tornado, draught, cold wave etc. It fact our country receives more than its fare share of disasters. Take the case of floods of 1998, worst in the recorded history of Bangladesh 60 per cent of the country was under water for over two months affecting 30 million people. Only 4.5 per cent of this flood water was from rain within the territory of Bangladesh and the rest (95.5%) came through the mighty rivers the Ganges and the Brahmaputra from outside the country.

The poor socio-economic condition of the people of Bangladesh makes them more vulnerable to the effects of disasters. This, combined with the scenes of in severe miseries and sufferings of the people as projected by the international electronic and print media in time of disaster, creates sympathy among the common people and the governments of the western world and generates lot of donations in cash and kind. A staggering figure of approximate Tk 5,000 crore (US dollar 1 billion) has been received by Bangladesh during the last one decade for post-disaster relief and rehabilitation programmes. The important question for us is that how do we use

the money?

Most of the aid received after disasters is spent on structural reconstruction projects and for covering the costs of highly expensive international and national consultants. Over Tk 750 crore was spent for research. studies and implementation of 26 components of the Flood Action Plan (FAP) designed mainly by expectriates after the floods of 1988. Billions of Taka was spent for construction of embankments and shelters in the coastal areas after the cyclone of 1991. While the critics question the quality of the construction and over-invoicing of the bills, as it happens in many Third World countries, the fact that 140 cyclone shelters, out of 360 paid for by the Government of Saudi Arabia, have been constructed outside the high cyclone and water surge risk area is deplorable.

From my involvement in disaster management activities in Bangladesh for over 30 years, I have observed painfully that not even 1 per cent of the donations received is spent for the development of awareness and capacity of the people, vulnerable to the threats of disasters. who know where the shoe

pinches. The damaging effects of disasters on human lives and property could be reduced greatly by two methods; structural and non-structural measures. The first one requires billions of dollars of investment in the form of infrastructural development e.g. construction of embankments, dykes, raising of roads, construction of reinforced cement concrete shelters, private houses etc. Bangladesh has invested quite a substantial amount of money in these constructions which are too little compared to the huge need.

For a resource constraint and highly disaster prone country like Bangladesh, it is

strongly advocated that we sponsibilities like DMB in should have the combination of Bangladesh are in existence in both hardware and software many countries of the world. and opt more for the less ex-Federal Emergency Management Agency (FEMA), equiva-lent of DMB in USA, is headed pensive non-structural measures. This involves massive by no less than a person like Mr public awareness programme (PAP) leading to the enhance-James Lee Witt, a close confiment of capacity of the vulnerdent and associate of President able people to cope with disas-Bill Clinton. This reflects 'the ters. PAP is recommended to be high level of political commitintegrated into structural solument by the Government of tion measures in order to en-USA for management of disas-

sure the active participation of

people with the infrastructures

e.g. maintenance and use of cy-

clone shelters, embankments

The term Disaster Manage-

ment covers both pre-disaster

preparedness and post-disaster

response and reconstruction ac-

tivities. But disaster managers

in Bangladesh, from both public

and NGO sectors and trained

abroad in institutions started

and run by retired army Gener-

als, have their mind set only on

post-disaster operations under

'Command and Control" the-

ory. This is based on their mis-

conception that the victims of

disasters in third world coun-

tries, mostly from lowest eco-

nomic and social strata of the

society, are incapable of help-

ing and supporting themselves.

The primary responsibility

for promoting and developing

pre-disaster preparedness

against disaster in normal

times in public and private sec-

tors lies with the Disaster Man-

agement Bureau of the Govern-

ment of Bangladesh, an out-

come of UNDP project no

BGD/092. Since it was designed

and prepared by consultants,

mostly expatriates, and is now

funded by multilateral and bi-

lateral agencies, it seems that

the GoB does not have the seri-

ous sense of participation in

and ownership of the project.

While disaster management re-

quires high professionalism

and expertise, frequent change

of staff of DMB, lack of their

professionalism and low level

of authority of the organisa-

tions to co-ordinate resources

of other ministries, raise ques-

tion about the commitment of

the public authorities for pre-

disaster preparedness. It is over

five years since Disaster Co-or-

dination Monitoring Unit

(DCMU) was funded by UNDP as

a precursor to DMB. Large sums

of money have already been

spent on consultants and in the

purchase of hardwares. I think

now is the time both for UNDP

and the GoB to conduct an eval-

uation about the capacity of the

staff and achievement of the or-

ganisation. The basic concept of

the DMB is still sound i.e. to act

as the national focal point for

disaster management. But GoB

needs to decide what role it

wishes DMB to play in the fu-

ture. What will it's mandate be?

Will it be taken on to revenue

budget once UNDP funding

Organisations with the re-

It is an established fact that in natural disasters, particularly in the post-disaster emergency phase, most of the survival needs of the disadvantaged people are met by the people themselves, their extended families and communities and NOT by the public, private and foreign organisations as usually projected by the media. Let us take the case of devastating cyclone of 28 April 1991 which killed 138,000 people and affected millions. While the operational NGOs took almost a week to mobilize and gear up their responses, the GoB relief operations started even later. Foreign rescue and relief teams e.g. the US Army personnel (whose operation was termed as 'Operations Sea Angels') with

A trawler from Myanmar grounded at St Martin Island during cyclonic storm of May 1994.

their duzens of ships, boats, he

licopters and amphibian vehi-

cles, the British Navy, the

Japanese rescue team, the

Canadian medical squad and

the rescue and relief teams from

many other countries started

arriving from May 14, sixteen

days after the disaster hit the

coast. In this critical period of

two weeks, when availability of

survival needs e.g. food, water.

clothes, shelter and medical

support makes the difference

between life and death, the

emergency needs of the mil-

lions were met by the people

themselves and their immedi-

ate community. The memory of

the unprecedented floods of

1998 is still fresh. It is the peo-

ple, the common people, house-

wives, students, teachers, busi-

ness community and others

who provided the emergency

survival assistance mainly in

the form of chapatis, mollasses,

khitchury and water to over 30

million people directly affected

ever tried to put a value to the

total material assistance pro-

vided by the people to the people

in time of disaster. Let alone the

care, love, affection and prayers

that are always associated with

such support. In fact helping

people in distress, particularly

the near and dear ones, is part

of our religion and in-build in

taged people living in areas

vulnerable to the threats of

natural disasters have devel-

oped their own survival tech-

niques and coping mechanisms

over thousands of years. What

is needed now is to conduct in-

Similarly, the disadvan-

our tradition and culture.

No-body in Bangladesh has

by the disaster.

indigenous techniques and mechanisms, design and develop communication materials and disseminate them back to the people through massive public awareness programmes. The dissemination should be done through. Inter Personal Communication (IPC) method supported by different areaspecific effective communication media and backed by TV. radio and print media.

Under IPC, proper level approach should be made by trained programme staff and volunteers e.g. students, teachers, imams, businessmen. women, TBAs, local leaders family planning and agriculture extension workers and others to all the adult and students of disaster prone areas. Effective indigenous communication media will include jari, sari, jatra, popular theatre, posters, leaflets, film shows. religious waz mehfils, lecture by imams of mosques at Jumma prayers, etc. In fact all the key actors in any given community should be mobilized to act as volunteers to disseminate the disaster propenedness messages to their fellow community men. The success of BRAC in promoting

- File photo: AZ Khan, NACOB

the preparation of Oral Rehy

dration Saline (ORS) through

the methods mentioned above

paredness Center (BDPC) con-

ducted a mini study with the

support of UNICEF in the island

of Hatiya about the indigenous

survival techniques and coping

mechanisms against cyclone

and recommended for a one

year programme to develop pub-

lic awareness through the most

effective communication media

including the IPC. It was en-

couraging to note that the cost

of developing awareness lead-

ing to enhancement of skill and

capacity of a person was only

Tk 30 (US sixty cents) compared

to Tk 8000 required for cost of

construction of shelter-space

per person. While effective pub-

lic awareness helps changing

the mind-set and is hopefully

passed on to generations with

out any cost, a shelter has life

for a limited period of time and

requires regular expenses for its

repair and maintenance. Suc-

cessful public awareness pro-

gramme (PAP) will result in de-

veloping adequate and effective

family and community based

disaster preparedness. It wil

create an environment in

which vulnerable people will

consider pre-disaster prepared

ness as part of their day to day

life. PAP will inspire, motivate

and encourage people at large to

In addition to running.

sponsoring and supporting

massive public awareness pro-

grammes to enhance the skill

and capacities of the people to

live with disasters, it is recom-

mended and hoped that the ap-

help the people in distress.

Bangladesh Disaster Pre-

is a unique example to follow.

propriate public authorities Local Government institutions and NGOs would consider to implement, among many others the following suggestions. - All development pro-

grammes in disaster prone areas MUST ensure that disaster preparedness and mitigation components are in-build into

- All staff posted in disaster prone areas MUST undergo a special training course on disaster management.

- In line with the Cyclone Preparedness Programme (CPP), an organization having over 30,000 volunteers in the cyclone risk areas. effort should be made to initiate Flood Preparedness Programme (FPP) in flood prone

 Disaster preparedness components should be included into the academic syllabus of school students from class III.

- Every school in disaster prone areas should have disaster squad similar to the ones like Boy Scout, Girl Guide, Junior Red Cross, Kochi Kachar

- Effort should be made to use all existing pucca structures in disaster prone areas as shelters in time of disaster.

- Massive campaign, similar to the ones used for promotion of family planning programme, ORS preparation etc. should be conducted round the year through all effective communication media.

— ▲ National Disaster Preparedness Day should be observed throughout the country and a mock simulation exercise of warning, evacuation, emergency operation and co-ordination be conducted from national down to the village level. - The hardware of structural

mitigation must be combined in an integrated way with the software of non-structural mitigation approaches to Community Based Disaster Preparedness i.e. focusing on building even greater self-reliance. awareness and capacities for Bangladesh's greatest disaster management asset - it's resilient and self-reliant people.

The most important of all. and to start with, the DMB should be reactivated and rejuvenated with the right persons for the right jobs. Professional disaster managers may be appointed on contract and or the responsibilities and tasks of DMB could be contracted out to professional organizations. DMB's potential to be the national focal point for all disaster management activities can be realized provided there are support and commitments from the highest level of GoB, a refocusing of its objectives and staffing by a core of motivated professional disaster man-

Successful public awareness programme with the aim of changing the mind-set and developing the capacity and skill of people will, hopefully reduce the loss of lives and property substantially during in any disaster. People, mentally prepared to face the challenge of disaster, will not be panicky and have much less effects of trauma after the disaster. There will be no need of expensive exercise of air dropping of food and water and resoue operations by national and foreign defense organisations. The cost of emergency relief operations will be reduced greatly. People at large will be encouraged and motivated to help each other in time of need. It will help develop confidence and organization of the people which will contribute to their participation in development programmes in the area. We have lot to learn in this respect from the successful experience of the Peoples Republic of China

The outline of programmes suggested above for an appropriate and effective disaster management approach in Bangladesh costs very little. As mentioned earlier, the cost for developing public awareness for one person is only Tk 30 (US

sixty cents). A massive public awareness programme for one year involving all the change agents (e.g. students, teachers, imams of mosques, TBAs, family planning and agriculture extension and development workers, co-operative members, local institution leaders and others) for all the people in one district e.g. Cox's Bazar or Patuakhali would cost only half a million dollar. Similar programme for all the 5.2 million people living in high cyclone risk areas in the coastal belt and off-shore islands would cost only US \$3 million, much less than point five per cent of what the donors have paid for post-disaster operations in Bangladesh in the last one

Since the worst cyclone of November 1970, we have lost over half a million lives. Let's not wait for another severe disaster to activate ourselves to think of the most appropriate and cost-effective approach to disaster management in Bangladesh. The key actors, the GoB and the donors, should ACT, and NOW.

Practical solutions to the problems of effective disaster management are available. Bangladesh possesses the knowledge, expertise, knowhow and resources to find innovative and indigenous solutions. It is rather like a jigsaw puzzle, all the pieces are there, they just have to be put together Perhaps what is lacking is a sense of united national resolve based on the highest levels of GoB commitment and political will to assemble all these fragments into a cohesive national disaster management strategy involving all elements of soci-

The Prime Minister may kindly consider to decide to take the issue of strengthening disaster management "by the scruff of neck" and appoint a "Prime Ministerial Commission" with the mandate and authority to draw together all the pieces of this national jigsaw puzzle and implement a course of action supported at the highest level. This might provide durable solution.

In the mean time, the donors, who subscribe to the concept of empowerment of poor in disaster management. may consider sponsoring a low cost pilot project of effective Public Awareness Programme in a small scale. Hopefully its success will encourage the GoB to adopt and replicate the project at national level.

The writer, former Deputy Secretary General o Bangladesh Red Crescent Soci ety and former Country Representative of Oxfam is Director of Bangladesh Disaster Preparedness Centre.

Tribute to Major Ghani

by Colonel (Retired) Tajul Islam Ghani

HE 41st anniversary of death of Major A Ghant the founder father of the East Bengal Regiment was observed on 11 November. On this day in 1957 this valiant son of the soil popularly known as "Tiger Ghani" breathed his last. His memorable deeds of valor are recounted even today

with great respect and honour. Major Ghani was born on the 1st December 1915 at village Nagaish in Brahmanpara Thana of Comilla District. Completing his higher secondary education he joined the Bengal Fire Service in Calcutta. When the Second World War was at the doorsteps of India he joined the British Army and was commissioned in the Pioneer Corps in 1942. Major Ghani was of the

opinion that if the other races

like the Pathans, Jats, Punabees etc could pride themselves of being martial races then why the Bengalis shouldn't have a military institution of its own to prove to the world that they are in no way less worthy as soldiers. Being imbued with nationalistic fervour, Major Ghani during his active service in Second World War found that the Bengali Muslim soldiers serving under him in the Pioneer Corps were sturdy, active and painstaking and they might help him in fulfilling his long cherished desire of founding a military unit composed purely of Bengali Muslims. With the end of Second World War when the Pioneer Corps. units were gathered for reorganisation Major Ghani expressed his desire to Lt Col. RR Moriarty the commandant of the Pioneer Corps Centre in Jalna, India, Lt Col Moriarty was deeply impressed with the idea and inspired Major Ghani to make his selection of the personnel with whom the nucleus of the proposed military unit could be formed.

With the partition of the subcontinent Major Ghani moved to Dhaka with two pioneer Companies, 1256 and 1407 recommended for retention in the post war India. On the resignation of General Sir Frank Messarvey KCSI, KBE, CB, DSO, as the first Commander in Chief of Pakistan Major Ghani whilst congratulating the CinC expressed his hope that a regiment comprised of Bengali Muslims would be raised out of which the two Pioneer Corps companies could form the nucleus. General Messarvey in his reply endorsing the hopes of Major Ghani said "You will form part of the first unit and I hope you will show to the world that Bengali Muslims are as good soldiers as any."

With the inspiring words of the CinC the pioneers of Bengal Regiment 1256 and 1407 Pioneer Companies pitched their camp at Kurmitola, then a wasteland, in October 1947. Ma-



jor Ghani with the rare sense of devotion worked and organised the two companies into an infantry unit. And on the 15th of February 1948 the official flag of the East Bengal Regiment was raised at Daroga Bagicha in Kurmitola.

At the outset the recruitment was conducted by a recruiting team of the regiment led by Major Ghani and within a short time the battalion drew the attention and admiration of its own people. No obstacle or odds could stand against this unyielding onward march of the team. Honest and patriotic citizens came forward to join hand with this dedicated son of the soil. Consequently his attempt of recruitment bore desired result. Suitable candidates for recruitment poured in abundance and continued to earn the trust of the people for whom it was

During his meteoric lifetime he had the satisfaction of seeing the 2nd Battalion of the Regiment raised, and more followed after his death not only to safeguard the nation but also to safeguard the peace of the world. Worthy of mention that the Regiment celebrated its Golden Jubilee on 15th February last.

Major Chani did not have an easy sailing in the army. Being thoroughly disenchanted with the Pakistani authority he left the army and joined active politics in 1953. He was elected member of the Legislative Assembly in 1954. He devoted himself for the uplift of the toiling masses and the people in general. In October 1957 he led a delegation to World Veterans Federation Conference in Germany. On conclusion of the conference he succumbed to a massive heart attack expired on the night of 11 November 1957 in Frankfurt. His mortal remains were flown in the country and was buried with full military honours at Comilla .Cantonment graveyard. He was awarded the Independence Day Award by Bangladesh Government in recognition of his deed

in 1981.

Axworthy Deemed Worthy of North-South Prize

Clyde Sanger writes from Ottawa

Canada will chair the UN Security Council in February, and when that happens, its foreign minister, Lloyd Axworthy, will play an important role. Gemini News Service reports on the forces that drove Axworthy to the international stage from his roots in an immigrant neighbourhood.

when he was assassinated.



LLOYD AXWORTHY Wins Council of Europe's North-South prize

TE has just won a Council of Europe North-South L prize and one year ago he came close to winning the Nobel Peace Prize.

And when Canada takes its seat on the United Nations Security Council for 1999 and 2000, and becomes the Council's chair next February, Foreign Minister Lloyd Axworthy will be there making waves that

may ripple round the world. Not bad for someone who as recently as December 1995 was almost certainly thinking that his career as a Canadian politician was on a steep downward

Axworthy has always wanted to be foreign minister, but he put his reforming zeal into the other cabinet jobs he was given along the way, particularly as transport minister and then in charge of the huge department of human resources development.

He comes of this zeal honestly. While his father was an insurance agent in Winnipeg, his mother Gwen was a tireless activist in the United Church of Canada, which has long had concerns and links with countries as far afield as Angola,

Zambia and South Korea. Born in December 1939, Axworthy grew up in the stimulating atmosphere of North Winnipeg, filled with immigrant families who had come from Eastern Europe to make a better life in the Canadian prairies.

He was a brilliant student as well as sportsman, and has a doctorate from Princeton. He was in his impressionable early twenties during the Kennedy

years. Robert Kennedy, an idealist with a tough core, was his role model. Axworthy wept

Coming from the western province of Manitoba, he had an advantage over most other Liberal — in other words centreright - members of Parliament, who in recent years have largely come from the central Canadian provinces of Ontario and Quebec. Although unlikely to become prime minister — his French is not strong — he was virtually assured a place in the cabinet

During the early 1980s, the final years of the Pierre Trudeau government, he was first in charge of employment and immigration, and then of transportation. When the Liberals returned to power in 1993 he was given charge of human resources development, a department with a budget of \$69 billion, the largest of all. It included training and post-secondary education and the social assistance system, which was creaking with the weight of the unemployed who had suffered from the recession of the early

the whole system, turning a passive system of income support into an active one of getting people retrained. It was a massive task, and he didn't make it easier by relying on outside advisers rather than on his own bureaucrats.

Axworthy set out to reform

Meanwhile, the government's large deficit was drawing heated criticism and Finance Minister Paul Martin seized the initiative with a tough budget in February 1995 which effectively sliced half the recipients off the list of those receiving unemployment insurance. Axworthy's reforms, inspired by a social conscience more than by budget economists, never made

Then in January 1996 he was given his chance as Foreign Minister. How to improve the world at top speed? As before, he looked outside the bureaucracy. He found a smart 13year-old boy from Ontario. Craig Kielburger, campaigning in India against the exploitation of child labour. Axworthy broadened this theme to reviewing the long-time conflict between trade and human rights. and put his weight down on the side of human rights, and of funding activists in many coun-

tries. This set him at odds with Prime Minister Jean Chretien,

who had been leading groups of businessmen, under the title of Team Canada, to countries in Asia and Latin America in search of trade with scant concern about whether those countries were under dictators like Suharto.

In June 1997 a mainly nongovernmental conference in Ottawa seeking to ban anti-personnel landmines aught his imagination. He set his diplomats to work with like-minded governments and citizens' groups on a treaty, giving a six months' deadline.

Jody Williams the leader of the campaign, won the Nobel Peace Prize in 1997 for her efforts, while Axworthy chaired an emotional conference in December, at which 122 countries - but not the United States signed the treaty. By September 1998 the necessary 40 countries had ratified, which will bring it into effect in March 1999.

Axworthy is already on to another campaign, for reducing military expenditures by restricting small arms. He seems to aim at one end of the spectrum of armaments while others campaign for nuclear disarmament, and this is in line with one of his slogans, "principled pragmatism" which means "attempt the achievable."

In his many speeches two thoughts often recur. One focuses on "human Security", going beyond the ending of armed conflicts to guaranteeing the elements of a decent life. This other is the use of "soft power", a phrase he credits to a Harvard professor Joseph Nye. Axworthy promotes it to suggest a coalition of middle-power states like Canada can persuade others into better behaviour, since they cannot coerce them.

Does he sound too good to be truly a politician? He has so many things he wants to do, it is said that he doesn't stay with any of them long enough. He has not shone at taking time to chat up his colleagues and "be collegial". As a speaker he tends to mumble.

In the Commonwealth actions against General Sani Abacha's Nigeria, he was to the fore in pushing for trade sanctions. The activists praised him for it, but he did not convince the African members of the for-

eign ministers' group. The writer is former director of communications at the North South Institute, an independent economic research group in Ottawa.

depth studies to compile their Invisible Actors in Hunger Drama

Erwin Northoff writes from Rome

In some parts of the world the role of women in agriculture has become increasingly dominant as men are forced to leave their homes in search of jobs and income in towns and cities.

OMEN shoulder more and more of the burden of providing food in many parts of the world as they plant, plough, harvest and fish, gather fuelwood, fetch water, cook, breastfeed, and sell

foodstuff. But although they are the main actors in feeding the world and fighting hunger and malnutrition, most of their work is unpaid or grossly underpaid and they have little or no access to land, credit, train-

ing and technology. Far too little attention is paid to alleviating women's drudgery in rural areas, the UN Food and Agriculture Organization (FAO) warned on the occasion of World Food Day - 16 Oc-

tober 1998. The theme of this year's World Food Day and FAO's international television was campaign TELEFOOD was Women Feed the World' - a remainder to governments and the international community that the situation of women in rural areas needs to be improved to ensure food security and reduced the number of undernourished people — now 800

million. On a global scale, women cultivated more than half of all

the food that is grown. In sub-Saharan Africa and the Caribbean, they produce up to 80 per cent of basic foodstuffs. In Asia, they account for around 50 per cent of food production. In Latin America, they are mainly engaged in subsistence farming, horticulture, poultry and raising small live-

In countries in transition. the proportion of rural women working in agriculture ranges from about a third in Bosnia and Herzegovina to more than half in Poland.

In some parts of the world the role of women in agriculture has become increasingly dominant as men are forced to leave their homes in search of jobs and income in towns and cities. This new trend, called the feminization of agriculture, is most accentuated in sub-Saharan Africa where the male population in rural areas is falling rapidly and women are now forming the majority to smallholder farmers. Women head approximately one third of rural households today, according

to the FAO. While the dominance of women in rural areas is evident, policymakers, planners and extension officials often behave as if women did not exist, as if the situation and needs of all farmers were the same. whether they are men or women.

"Development policymakers are becoming increasingly aware of the crucial contribution of women farmers to food security," said Sissel Ekaas, Director of the FAO Women and Population Division. "Nevertheless 'gender blindness' prevails and agricultural policies on the whole still do not address the needs of women farm-

ers adequately. Studies have shown that when women farmers have access to resources such as land, credit, technology training and marketing, they are more productive than men farmers. But the world's primary food producers have generally less access to resources than men. Ms Ekaas listed the reasons for this: 'gender-blind' development policies, discriminatory legislation, traditions and attitudes, lack of access of women to decision-making processes.

Without secure land rights. women are often denied access to credit or the benefits of membership in co-operatives and farmers associations. Land ownership titles, however, are mostly given to the male head of household. For example, less than 10 per cent of women farmers in India, Nepal and Thailand own land. Similarly, in Latin America agrarian reform programmes tend to give land titles to men.

Without secure land rights, women farmers find it difficult productivity," Ekaas said.

to obtain financial support from banks. Land is usually required as collateral for loans and credit schemes, and loans are often channelled through rural organizations to their members. Membership is often limited to the head of household. "This is a serious obstacle to women farmers and their

Without credit, women farmers cannot buy inputs such as seeds, fertilizers, and better

technology, or hire workers. An analysis of credit schemes in Kenya, Malawi, Sierra Leone, Zambia and Zimbabwe found that women received less than 10 per cent of the credit awarded to smallholders and one percent of the total amount of the credit directed to agriculture. In Jamaica, women account for only five per cent of loans granted by the Agricultural Credit Bank. Ironically, numerous studies have suggested that women may

be more reliable than men in repaying their debts. Where they are the main food producers, women should also be a priority target of extension and training initiatives." Ekaas said. However, it is common practice to direct extension and training services

primarily to men in most

An FAO study showed that female farmers receive only five per cent of all agricultural extension services worldwide and that only around 15 per cent of the extension agents are women.

- IPS/APB