

THE little village of Markunda in Bidar district of the South Indian state of Karnataka had never seen such an invasion.

Over 1,300 women from as far away as Mysore district in the South to villages in Maharashtra state had streamed into the village, some on foot and others in buses and cars.

The large open ground belonging to the local council was transformed overnight into a tent village, festive with coloured lights.

The event was the Information Fair organised by the Karnataka Women's Development Programme (KWDP). Wholly funded by the Netherlands Government, the KWDP is a five-year programme in three states (Karnataka, Gujarat and Uttar Pradesh) designed to empower women to recognise and deal with their own problems.

Its concept is simple: instead of the topdown approach, it builds from the bottom up. So its first step is to identify women from the participating communities who can assist women at the village level to form groups.

These groups then determine the issues to be tackled in their villages. The KWDP's direct contribution is non-formal education.

For the fair, each group in the village covered set their own priorities. For instance, the women from Bijapur district wrote plays which highlight the importance of literacy, as well as other problems confronting them like moneylending at usurious rates and exploitation by landlords.

Unique Fair Looks at Women's Issues

This programme for rural women encourages them to solve their problems and achieve goals themselves

Ms. Sriatha Batiwala, KWDP state programme director, says it is different from other programmes which use service delivery as entry point. The latter mode of development intervention, she says, "leads to dependency syndrome where communities continue to rely on an outside source to provide them with service."

More importantly, such interventions have what Ms. Batiwala termed "patriarchal underpinnings" and do not pay adequate heed to the needs of women who remain marginalised. In addition, the service delivery model fails to address the complexities of rural existence, she says.

Thus the KWDP deliberately chose to support village folk in acquiring the resources to run services for themselves, says Ms. Batiwala.

The idea of the Information Fair was also born out of a recognition of women's right to decide what they want to learn and how. When a representative of a non-governmental group in Maharashtra, involved in income-generating activities, approached the

KWDP for an opportunity for women to meet and exchange views, the fair was conceived. Consultation with the groups led to a widening of the subjects on which information was desired. Interestingly, the choice of subjects shattered many stereotypes about rural women's interests.

Apart from law, health and issues relating to income such as credit and loans facilities, the women wanted to know about alternative rural technologies such as biogas, smokeless stoves, horticulture and plant breeding.

One of the fair's most interesting sessions was the one on law. Conceived by Delhi lawyer Ratna Kapoor who asked students from the National Law School in Bangalore to conduct it, the session had resource persons who interacted closely with the village women to find out what they thought of customs like child marriages and sanctioned prostitution. The speakers then discussed the legal aspects of the issue and where the law abets discrimination or fails to give protection.

The women noted the incidence of child marriage in their families and that many of them were in fact child brides themselves. On women dedicated as young girls in Hindu rites to serve as prostitutes, some thought they were immoral women while others expressed sympathy.

The session with the village heads was another eye opener. One woman from Bijapur district who headed her group said the village head did not allow her to decide on certain issues important to the village,

earning her the ire of co-villagers. Another recounted her problems when she found out that a building contractor was mixing mud with cement to construct a village project, but somehow she managed to get the contract cancelled.

Such instances show how the "process of empowerment" desired by the KWDP is showing results. The very fact that the village women left their families to come to the fair is commendable, as many of them had never even stepped out of their village before.

Ms. Batiwala calls it "a great leap." She notes how the women approached the resource persons with confidence. There was no shyness, no coyness, no hesitation at all. They conveyed in their attitude the belief that they have a right to know," she says.

Nevertheless, it was asked if such confidence can be sustained once the funding stops. "For such an eventuality, our team has endeavoured to ensure that structures that are not integral to the process can be jettisoned at any point."

"For instance, already the State office of KWDP is not essential because the district coordinators are well-organised. If this programme can run even for 20 months, the process would have attained adequate momentum to continue even if funding stops," says Ms. Batiwala.

Another strategic decision she made while setting up the project in Karnataka was to minimise the interaction of city-based people with the village groups.

"The very presence of people from another class raises expectation of delivery of some form of services or resources, thereby undercutting the principle of self-reliance and empowerment," she explains.

Also, KWDP has found it easier to form the working groups when non-government organisations do not intervene. This is because NGOs, she says, start off being intermediaries but end up doing the service delivery themselves. — Depthnews Women's



Carora cattle, a high milk yielding cross breed between selected European and native cattle from Jamaica, Cuba, India and other countries, that Venezuela plans to make available to other developing countries.

Carora Cows, More Milk

The significance of the breed to the developing world is twofold. First, the Carora are uniquely well adapted to living in tropical climates. Second, they have an unusually high milk yield: an annual average of 3,052 litres per cow. The breed therefore has the potential to increase dramatically the supply of protein in developing countries.

ARACAS, Venezuela — A remarkable breed of cattle developed in Venezuela, with an astonishingly high milk-producing capacity, was one of the subjects discussed by TCDC focal points from 26 countries of Latin America and the Caribbean, who met here recently. Other topics included health, aquaculture, environment and information systems. The event was part of the annual meeting of the Latin American Economic System (SELA), founded in 1975 to encourage countries of the region to co-operate in promoting development.

The meeting, held at SELA headquarters in downtown Caracas, was literally a two-tier event. On one floor ministers and senior officials discussed wide-ranging policy matters, while on the floor below the focal points hammered out specific TCDC proposals and discussed projects for bilateral co-operation.

Countries represented at the TCDC focal points meeting were: Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, EL

Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay and Venezuela.

Also represented were the World Health Organization, the Food and Agriculture Organization of the United Nations, the International Organization for Migrants, the Action Committee for Supporting Economic and Social Development in Central America, the Caribbean Community and the Economic Commission for Latin America and the Caribbean.

The talk, given by Gerardo Santeliz Carrasco of the Venezuelan Association of Carora Cattle breeders, aroused intense interest among the delegates. The Carora is a type of cattle that has been developed over the past 60 years in north-western Venezuela. The cattle evolved by careful crossing of selected European breeds with native cattle from Jamaica, Cuba, India and other countries. This was the first briefing on the breed to an international gathering.

The significance of the breed to the developing world is twofold. First, the Carora are uniquely well adapted to living in tropical climates. Second, they have an unusually high milk yield: an annual average of 3,052 litres per cow, as against the national average in Venezuela of 1,318 litres. The breed therefore has the potential to increase dramatically the supply of protein in developing countries.

"A miracle" is how Mr. Santeliz described the breed. "With Carora cattle," he said, "We could bring per capita milk consumption almost up to the level of the United States."

He hopes that the breed will be made available as soon as possible to all the countries that need it. First, however, it will be necessary to set up a development centre where research into the strain can continue and to which people can come from all over the world to obtain the cattle. For this purpose, \$140,000 is being requested from the Perez-Guerrero Trust Fund. Cooperation South

The oases, dotted with new villages, are protected by criss-crossing belts of willows, poplars and drought-resistant shrubs. by Shu Bin and Yun Tong

New Oases Sprout On Sandy Wastes

been half buried by sand. The battles fought there over the centuries plus wanton tree felling and overgrazing led to ecological deterioration.

In the 100 years from 1850 to 1950, sand dunes from the desert moved 50 kilometres southward and more than 130,000 hectares of farmland and 412 villages, were engulfed.

In 1949, trees and shrubs covered only 2 per cent of the area. The proportion has now risen to 38 per cent, and the greenery has improved the environment. More than 20 kinds of birds and such animals as fox and hare have reappeared.

According to Sun Zhong-tang, senior engineer of the Sand Control Station at Yulin, the vegetative cover has anchored or semi-fixed 60 per cent of the 600,000 hectares of shifting sand. Trees, shrubs and grass have been grown on more than 800,000 hectares of land.

The transformation has attracted scientists and other visitors from more than 20 countries, including Germany, the United States and Japan. They see it as an example of the successes achieved in halting environmental deterioration a problem baffling many parts of the world.

The economic results are remarkable, senior engineer Mr. Sun said. Timber reserves, for instance, are estimated at 3.4 million cubic metres, worth 680 million yuan (US\$130 million). This is nearly 20 times the total investment earmarked for sand control in the past four decades.

The fight against desertification started in 1958 when the Yulin Sand Control Station was established by the Chinese Academy of Sciences. The dry

climate posed a grave challenge.

At first, scientists and technicians planted some common fast-growing trees like poplar and willow and supplemented them with shrubs and grass. The drought stunted the growth of the trees so that the plants, now 20-30 years old, are called by the local people "half-dying dwarf old men." The survival rate of shrubs and grass was also low.

By the mid-1970s, scientists and technicians came to know clearly the whimsies of the sand area. They began to adopt a new strategy: growing drought-resistant shrubs and grass as the front line of defence, and after these took root, they planted tree saplings.

The new strategy worked. Four principal windbreak tree belts totalling more than 1,500 km long have been built dividing the land into large tracts. In these large tracts, the villagers have grown shrubs and pastures.

Smaller shelter belts consisting of three or four rows of trees have been grown around the fields and low-lying land. The trees, shrubs and grass have held the sand in check.

Over the past decade, scientists at the Lanzhou Desert Research Institute have introduced more than 130 species of shrubs from other parts of China and North America. Among these, about 20 have been widely grown.

Mongolian Scotch pine and Chinese pine, formerly believed to be impossible to take root in this arid area, have been successful grown on 140 hectares of land.

To speed up progress, the Yulin Sand Control Research Institute has used aerial seeding since 1974. But some of

the seeds were swept away by wind.

The problem was solved by dense seeding and by mixing the seeds with soil before broadcasting. About 47,000 hectares of young forests have been grown by aerial seeding.

The Yulin-Yanchi desertified area has rich underground water tables, with a total reserve of 876 million cubic metres. The farmers have dug thousands of wells, mainly for irrigation. A well can irrigate two to three hectares of farmland.

Since 1985, the government has encouraged farmers to contract land for afforestation or for the management of tree plantation. In return, the government gives the contractors priority in the supply of tree seeds, saplings, funds, fertiliser and technical service.

A group of 47 families headed by farmer Shi Guangyin in Hatzeliang village of Dingbian County has contracted to control 1,600 hectares of sand swept land. In the past three years, they have grown trees and grass on more than 1,000 hectares.

The standing timber of their forests is estimated to be worth 100,000 yuan (US\$19,000). So far, 100,000 families have contracted to transform 270,000 hectares sandy land.

In 1990, the Yulin-Yanchi desertified area produced 250 million kg of grain, averaging 450 kg per capita. With more than enough for their own food, farmers have expanded their stock-raising industry. They also earn 45 million yuan (US\$8.6 million) a year from selling timber, fruit and hand-woven articles made of willow twigs and branches of shrubs.

— Depthnews Science

Women Active in Fisheries

ROME: In Asia's fishing communities, women are rarely the ones to go sea, cast the nets and haul in the catch.

But in other fisheries activities, women play extensive roles. However, since their activities are not as visible or considered as important as those done by the men, they often fail to benefit from development interventions.

The Food and Agriculture Organisation's (FAO) Committee on Fisheries says that women in developing countries rarely go out to sea to fish because this would prevent them from attending to their home responsibilities. In some places, women in fishing boats are considered bad luck.

They do undertake various fishing activities such as deep-sea diving for molluscs and pearls, or fishing with scoop nets, set nets or traps as in Nigeria, Benin, Guinea-Bissau and Cape Verde. Women also harvest aquatic products in areas with extensive coastal mudflats and shallow lagoons, or collect seaweeds and sea urchins.

"In many parts of Oceania, women have traditionally fished the reefs and lagoons daily, providing their families with a regular supply of much-needed protein," says the FAO. In countries which have long been practising aquaculture, women may also be found as researchers, hatchery technicians, fry collectors and tending rural ponds and fish cages.

An activity with female participation is fish processing. Large processing plants and factory trawlers, for example, employ women to fillet, sort, can and pack fish. Women are even more active in the smaller scale, traditional method of processing such as smoking, salting, drying or fermenting, which they can carry out while tending to other domestic chores.

The greatest income earning activity for women in the fishing industry is marketing. In West Africa, women are involved in one or more of the following activities: landing, smoking, transporting to the market, wholesaling, retailing at the market stall and in some cases providing credit to fishermen. In South and East Asia and in Latin America and the Caribbean, women do most of the fish retailing.

"In many cultures where fishermen migrate to follow fish stocks, women have traditionally accompanied them along the shore to handle the processing and marketing from their temporary camps along the coast. Such women are generally very competitive traders, as fish marketing is their sole source of income," says FAO.

Involvement in fisheries activities is exemplified by women traders in West Africa, notably Ghana, who "traditionally provide credit for fishermen in exchange for a preferential price for the catch." They may also catch bait and bait the hooks, or share the financial risk of

fishing with those who actually go out to sea.

Other activities — which may or may not be paid — include launching and beaching the boats, assisting in boat maintenance; picking the fish from nets and sorting and gutting the catch; fabrication and repair of ropes, nets and traps and providing parts and supplies for fishing.

There are also non-fisheries activities which bring in supplementary income such as salt making, vegetable oil processing and making handicrafts from sea products.

As professionals, women are employed in fisheries and aquaculture research and edu-

At the same time that they work in the fish industry, women in fishing villages also have to perform backbreaking and time-consuming domestic work. But little has been done to develop technology that would improve their workload.

Credit is also a difficult area for women, who often cannot get it from commercial banks because they cannot present acceptable collateral or simply because they do not know how or where to get formal credit. Thus they often resort to informal credit sources which are limited and charge higher interest rates.

The benefits of cooperatives — promoting group savings,

the use of new technology but also for the establishment of such facilities as credit and savings programmes.

FAO points to the need for adequate baseline information which would accurately reflect women's economic participation, both in waged work and in the unpaid but economically valuable activities mentioned.

It has recently been shown that the immune system does not "battle" alone — it works in close cooperation with the nervous and hormonal systems. Researchers at Ulm University working with Professor Horst L. Fehm now want to investigate if, and to what extent, processes in the central nervous system can influence the release of specific signal chemicals of the cytokine type, and thus affect the function of the immune system, during sleep. Here, in addition to the normal healthy state, every conceivable relationship between sleeping disorders and weaknesses in the immune system will be investigated.

At FAO, a Core Group of Women in Fisheries coordinates regular programme activities on women in fisheries development. Broadly, it aims to maximise the inclusion of women in project activities as well as to identify any negative impact on women of development initiatives.

The Core Group has developed a set of guidelines on Women in Fishing Communities. To ensure that women are adequately considered at every stage of project identification, preparation, implementation and evaluation in the field and at FAO headquarters.

securing bank loans, requesting vocational training and nonformal education programmes — were also found by FAO to be less accessible to women. In some cases, women do not meet membership criteria. Constraints on their time or their sense of inadequacy also prevent them from participating.

The introduction of technology to improve efficiency and simplify women's domestic tasks as well as fishery production activities were suggested by the FAO as important intervention measures.

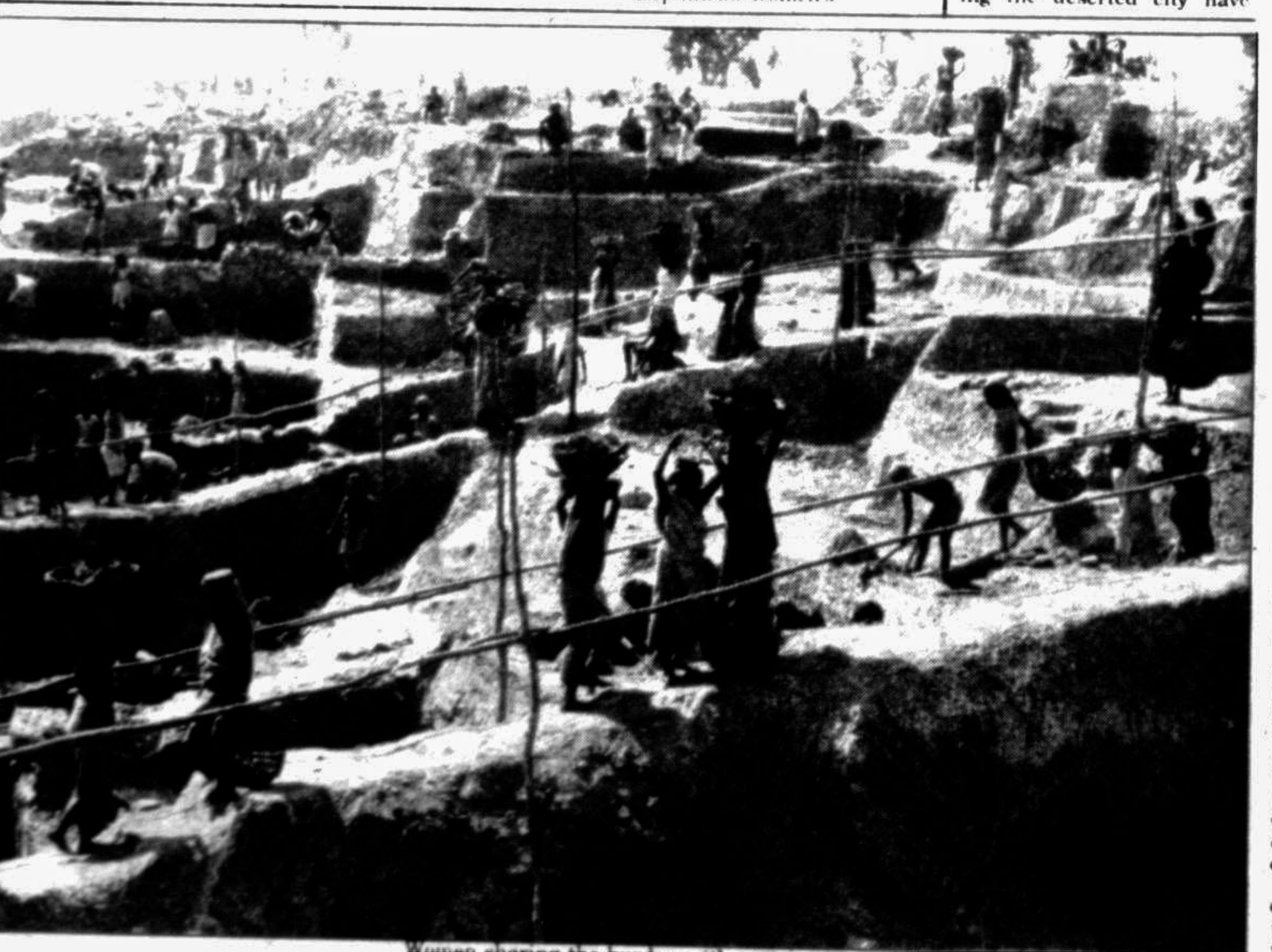
A special effort, adds FAO, should be made to involve women in training and extension programmes not only for

Often underrepresented in statistics, women actually play extensive roles in the fisheries sector

cation, management administration and public services. The range of such jobs, however, is narrower for women than for men.

One concern raised by FAO is that problems like lack of access to ownership and productivity-improvement services (such as inputs, credit, training), while affecting both sexes, are likely to be much more serious for women because of cultural and sociological factors that limit their role.

Another concern is that women, not being considered "fisherfolk," have continued to be invisible in statistical surveys used by policymakers to frame legislation and sectoral plans.



Women sharing the burden with men.