

# Evaluative Research with Limited Resources

Prof M N Islam

RESEARCH in Community Child Health in developing countries is of paramount importance. Most of the peoples in these countries live in rural communities. About 85 per cent people in Bangladesh live in the villages and 50 per cent of the total population are children below 15 years of age.

Health status of the children in the community reflects the real picture of health problems in the country. A child of today is the citizen of tomorrow. A country can be proud only when its children population are healthy.

Illiteracy, poverty, superstition, lack of proper sanitation, lack of safe drinking water and lack of health education are the important factors which influence the health status of children in the developing countries. High Infant Mortality Rate (IMR) in the range of 116-120 per thousand live-births in Bangladesh clearly reflects the health status of children of this country. Similar picture is also seen in most of the developing countries in Asia and Latin America. Malnutrition, Diarrhoea and Acute Respiratory Infection

(ARI) are still the major health hazards among children in these countries. In Bangladesh about 80 per cent of children suffer from some degrees of malnutrition, 10-15 per cent of which suffer from severe degree of malnutrition (3rd degree malnutrition - Gomez classification). Malnutrition, Diarrhoea and Infection make a vicious circle and the children cannot get out of it. As a result they show growth faltering at various stages of their life. Low Birth Weight (LBW) is another factor which also contributes to high IMR and also as a cause of malnutrition.

Research in Community Child Health with minimum cost is a new concept and may bring about revolutionary changes in identifying the real health problems in the community and making effective recommendation for intervention. The Government Health Services can undertake such low-cost community Health Research and can find out the real health problems in the particular area. The follow-up intervention in the form of arrangements for safe drinking water, immunization, propaganda for effective and exclu-

sive breast-feeding up to 5 months of age, timely wearing of home-made family foods, prompt treatment of diarrhoea and Acute Respiratory Infections with ORS and proper antibiotics, may save hundreds of children from untimely death.

## Advantages of Low-cost Community Research

Advantages of Community Research at low-cost is manifold. In the developing countries like Bangladesh where the per capita income is very low, scope of big research involving large amount of money and sophisticated instigated instruments and laboratory is limited. The government health budget can not afford to run such big research project and depends on external aids. Such planning in the health sector is not viable and is not encouraged. On the other hand Community Research involving minimum cost with direct participation of the people are readily accepted to the health planner of the country. They find out exact health situation in the community and can take immediate action in removing the problems. Simple inter-

vention like supply of safe drinking water, arrangement of sanitary latrines, improving the status of immunization and health education in the community, advising continued breast-feeding and timely weaning, supply of vitamin-A capsule, treatment of diarrhoea by ORS etc can yield maximum benefit to the people and also great relief to the government simultaneously if fund permits one or two centres of excellence in the big hospitals in the city can run sophisticated research project. But certainly this is not at the cost of minimum health requirements of the large population living in the vast rural community.

## Cost Effectiveness

It is therefore very vital to consider the cost-effectiveness of any research project. In this regard the concept of Community Health Research at minimum cost is very much encouraging. By investing very limited fund and limited expert manpower, the developing countries can get maximum benefit in improving the overall health standard of the people in the community. In Bangladesh we have seen the

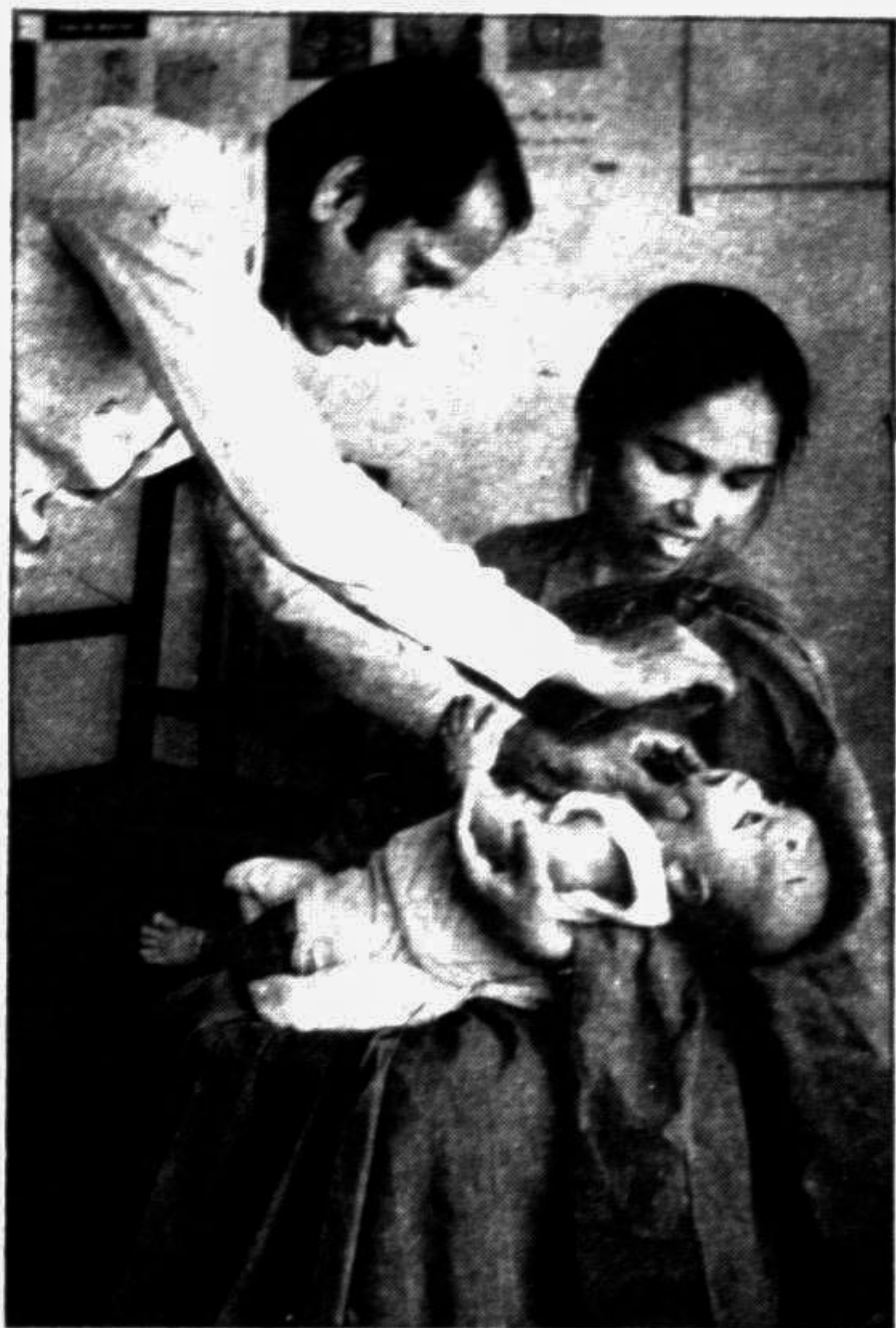
International Centre for Diarrhoeal Diseases (ICDDR,B) which is a very high standard Research Laboratory and also treatment centre for diarrhoeal diseases. But the amount of money which is required for maintaining this centre cannot be raised by the government of Bangladesh alone and as such requires international assistance. This centre no doubt, is pride project for Bangladesh but considering the cost-benefit this project and the overall health status of the majority people living in the rural community we can not but think seriously the concept of Low-cost Community Research. This is not the replacement of ICDDR,B but is definitely of much importance for better health standard of the people.

## Planning for Low-cost Community Research in Child Health

Planning for Community Research at Low-cost in Child Health requires a practical operational planning depending on the situation of communication, sanitation, literacy rate, health consciousness of the people, per capita income and the available local volunteers

for close contact with people. The planning should also involve the local administration like Upazila and Union Council and must convince them explaining the outcome of such project. Otherwise superstition and village politics may interfere and offer resistance in smooth implementation of the project. Moreover, the question of security of the health workers and the volunteers also depend on the full cooperation of the local administration.

From the above discussion, it is clear that Community Child Health Research at minimum cost can bring hopes for the millions of peoples living in the rural areas of the developing countries. Participation of the local people in any health programme can bring remarkable success in improving the health status in the community simple intervention and repeated propaganda for health education to the common masses can avoid untimely death of many children. EPI Programme and supply of drinking water and sanitary latrines to the villagers, should bring revolutionary changes in the health standard in developing countries.



A child being immunised under the EPI.

# Winds of Change Improve Agriculture in Tunisia

Too many people think development research means using modern technology and big machinery to improve farming in the developing world. But a project in Tunisia has shown the value of making improvements to time-honoured farming practices, in this case the use of windbreaks along fields. As Gemini News Service reports, Tunisian researchers have discovered ways of dramatically increasing food production by enhancing a technology that has been around for centuries. Now they just have to convince the farmers. by Allan Thompson

It is an ill windbreak that blows no good. That, in effect, is the conclusion of more than a decade of research in Tunisia on the use of windbreaks to improve agricultural production. Researchers examining the centuries-old practice of planting rows of trees to protect crops from wind made some

per cent and some forages doubled. But the more difficult task was finding out what type to tree, or combination of trees, worked best and under what conditions. Some farmers have long planted rows of cactus along their fields, but cactus keeps wind out and crops nearly suffocate as a result. Many farm-

higher growth and the whole row will need cutting back from time to time. Many farmers are concerned about the loss of farmland to windbreaks, and another research goal was to find if the benefits of wind protection exceed the cost of buying trees and the loss of productive land. "Before it used to be con-

sidered a lost space because it didn't produce anything," said Albouchi. "It improved production but wasn't considered a useful element in itself."

To enhance their viability, small forage plants can fill out the bottom of the windbreak and later be used for animal feed. Medical plants or spices can also be used. Even the trees themselves should be seen as a resource, for use as firewood or for the production of charcoal.

With those findings under its belt, the goal now is to get the message out to farmers and government technicians working in the field. This is being done through radio and television programming and a 20-minute video made available for use by field workers conducting seminars with farmers.

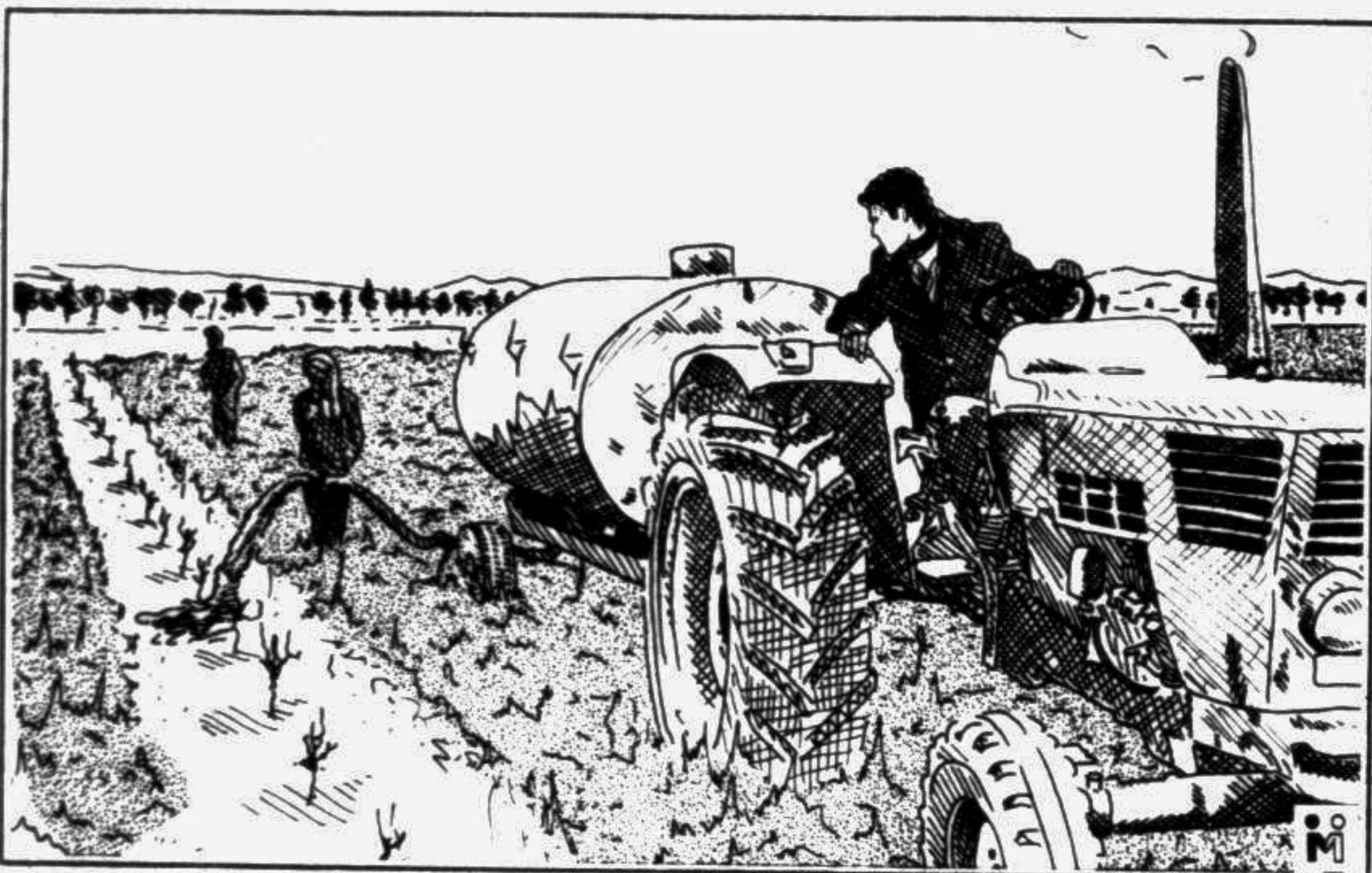
One idea is to use farmers themselves in the television and radio spots. "We have a farmer talk about these things because sometimes a technician talking about it is not so well received," Benzarti said.

With the end of the project in view, Benzarti is pleased with the results so far.

"Research on windbreaks could continue forever but I'm sure we contributed to a much better understanding of the subject and brought lots of improvements compared to what was there before."

— GEMINI NEWS

Allan Thompson is a Canadian journalist with the Toronto Star newspaper currently on a one-year internship with Gemini News Service sponsored by Canada's International Development Research Centre. As part of the award, he has spent several months conducting research in North Africa.



Planting a windbreak at El Fahs co-operative farm

surprising discoveries, not the least of which was the fact that most farmers have been doing it wrong all these years.

Some have not bothered to use windbreaks at all in the false belief that they take up too much land. And even those who knew enough to put trees along their fields often planted them too close together or used types inappropriate for local conditions.

Said project co-ordinator Jellia Benzarti: "People don't know much about the subject. For them a windbreak is a bunch of trees that you plant in a row that should grow and take care of themselves. We found it to be much more than that." Benzarti is an agronomist with Tunisia's Institute National de la Recherche Agronomique. The national forestry and arid region institutes also took part in the project.

Tunisia, with coastline exposed to the sea on two sides, gets more than its share of winds. Whether whipping down from polar regions or up from the Sahara, winds are present at least eight days out of 10 in Tunisia.

For that reason, farmers had been using windbreaks long before this study came along. But no one had ever bothered to prove why windbreaks are beneficial and beyond that, to look at different types and see which is best.

By comparing wind-protected test sites with unsheltered ones, the researchers proved conclusively that windbreaks enhance production. Tomato crops, for example, were 37 per cent higher when sheltered, beans went up 17

ers do not realise that windbreaks are meant to do what their name says — break the wind, not keep it out completely.

Building a better windbreak means correlating temperature, prevailing wind direction, type of crop grown, the lay of the land and the economic needs of the farmer.

The best conclusion is that there is not one type of windbreak, not a magic recipe," said Ali Albouchi from the forestry institute. "There are a number of things that must be assimilated and understood."

While the best windbreak has to be tailor made, there are some common factors to keep in mind, the researchers found. Windbreaks should be made of a variety of trees to protect against the whole system being wiped out by pests.

It is better to use a mix of species like cypress, eucalyptus and acacia. Some grow more quickly than others, to provide protection right away. Others have a longer lifespan and are more useful in the long term, even though it takes them a while to get established.

The roots can be protected by plastic to limit loss of water and eliminate weeds and pests. Farmers realise the importance of watering their crops but should not forget about properly watering the windbreak.

Farmers also have to learn trees in a windbreak cannot simply be left to grow wild. Often the lower branches must be trimmed to encourage

MANILA: Without question or hesitation, she welcomed me — a stranger, compatriot though I was — to her basement quarters.

A student in South Wales on a government scholarship in 1974, I had to visit London publishing houses for two weeks and had wanted to save my modest allowance for presents to bring home. So I asked a Filipina friend (who couldn't take me in herself) to find me an affordable place to stay. She took me to Fely Valdez.

It was then "gray November" to borrow an English poet's word's. Thurlow Street, where Fely's employer lived, was typically bleak with its row of stone apartments and black-limbed, scraggly trees. But maybe that was how things looked because I was desolate then at being separated from my small children for all of nine months.

Fely's basement became a haven of warmth, a point of contact for one so alienated from her surroundings. Not only did I get free bed (or couch) and board, I was treated to her cream-topped apple crumble and her consoling chatter (we shared memories of an Ilocano childhood, both being from the same Philippine region), and had free access to her television set which she was often too tired to watch after a day of demanding housework.

But this is her story, not mine, so let me reel on to some 17 years later. Fely recently came home to the

# A LIFE WELL LIVED

A conscientious and respected Filipina, now a pensioner in Britain, looks back on a lifetime of hard domestic work which has taken her far from her childhood home in rural Luzon.

by Estrella M. Miniquis

Philippines for a visit, and a meeting with her was not to be missed.

Long hair now cropped though with more strands of grey, she looked not a day older. And, she proudly announced, "I am now a pensioner of the British Government."

She still makes a living cleaning other people's houses, she said as we talked past midnight. But she became eligible for a pension in 1987 as a permanent resident and receives a £29 (US\$47)-a-week allowance as well as £25 (US\$40) more in housing and income support.

Also, she has government housing — a bed-sitter (room with toilet and kitchen) at the Trustees House for the Aged in a London suburb, "accessible to transport and shops and everything."

The house has a female warden who checks on tenants at noon — if they don't open their doors at 12, she knocks or lets herself in to see how they are doing. Residents have a cord in every room with which to summon help.

Fely had occasion to test

the promptness of response to an SOS when she slipped while hurrying down the stairs of the laundry room. Her right shoulder was dislocated. The warden promptly called an ambulance. She was back from the orthopaedic hospital ("in a cab, by myself") that same night.

Although subsidised, however, the beddatter does cost a steep £47 (US\$75.80) a week, on top of which Fely pays £2 (US\$3.20) more for the telephone and electricity. Unmarried, she also sends a nephew and two nieces in the Philippines to school, aside from regularly sending money to her aged parents and other close kin.

Thus, though a pensioner, she still makes the trips to people's homes, cleaning them for a minimum wage of £5 (US\$8) an hour.

Being a senior citizen has other perks, such as free travel by bus and train within London after 9 a.m. ("You'll know it's past 9 when you see us old people coming out"). As a permanent resident, she is also entitled to free medicine, medical consultation and hos-

pitalisation as well as to dental and optical benefits.

"Would I have all these if I had not left the country," seems to be her unsaid statement.

Recruited by an agency to work in London as a domestic help in 1972, Fely says she really has no accumulated assets except for what she has invested in her relatives' education and upkeep.

What she has managed, she recalls with pride, are a few excursions within and outside England — a pilgrimage to Lourdes in France, Paris by coach, Liver Liverpool, Plymouth, Stratford-on-Avon. Eight years of folding heavy linen at the Holiday Inn (which gave her sciatica) also earned her a week's free stay at the Holiday Inn in Bristol.

Looking back, Fely recalls that she has been a live-in help for a least five employers, including Greece's exiled King Constantine and one or two British aristocrats.

Now that she can take it a little easier, she plays bingo twice a week with co-tenants. "When bothered about something, I take the bus and go

# WOMEN FIGHT APARTHEID LEGACY IN NAMIBIA

LUDERITZ is really two towns divided by a railway line. On one side, a deeply conservative community of German origin lives in fine stone houses on streets named Kaiser or Bismark, reminders of the days before the First World War when Germany controlled the territory.

Fortunes were made from diamonds that littered the desert around Luderitz Bay. Today, there is just some small-scale mining of gemstones and metals. On Sundays, families pray in one of the seven Lutheran churches.

Luderitz's black community lives on the other side of the track, which leads to Windhoek, the capital, 5,000 kilometres away. Little has changed in Benguela and Nautilus townships in the year since Namibia gained its independence. It was under South African rule for 75 years.

Unlike the other side of the tracks, schools here are overcrowded and there are no cinemas, no hotels, no shopping centres, no parks. From shanties made of rusting corrugated iron, gray smoke from cooking fires drifts over a desolate landscape illuminated with almost unreal clarity by the brilliant sunlight.

By mid-morning, men without work sit outside bottle shops in cast-off clothing, morosely drunk. In townships throughout Namibia alcoholism is a serious problem, in part a legacy of the apartheid system which used alcohol dependency to make people easier to control.

Some men work for six months of each year on the large commercial trawlers that ply the freezing waters of the Benguela Current off Namibia's coast for crayfish and rock

lobster. Their catch makes Luderitz the centre of a large fish processing industry where many women from the townships work.

On a recent afternoon, about 45 women who work in the crayfish canning factories, members of the newly formed Namibian Allied Foodworkers Union (NAFU), gathered in the assembly hall of Nautilus Primary School to meet Sharon Capeling-Alakija, Director of the UN Development Fund for Women (UNIFEM), which has just launched a three-year, US \$1.5 million programme in Namibia. She had come to listen and learn first-hand some of the problems facing these women.

The meeting was organised by the Rössing Foundation, a local non-governmental organisation (NGO) which runs an education centre for Luderitz's two townships. The Rössing Foundation is one of two Namibian NGOs chosen to channel UNIFEM-funded programmes to train women in a variety of work skills and to increase awareness of their legal rights under Namibia's new Constitution.

Sitting in a semi-circle, old women with lined faces and mothers nursing children are dressed in their Sunday-best, many wearing colourful beads and headresses.

There is Mavis Hangula, who was widowed when her husband was killed in Namibia's war for independence. On his death, as decreed by law and tribal custom, all goods from the marriage, their house and meagre savings, reverted to her husband's family. Now she and her children are short of everything — food, clothes, education, possessions.

Elizabeth Naftali married a man who abandoned her with six young children and no means of support. She had a very hard time of it. The boys stopped school, and when she was 13 the eldest girl had a baby, born into a family where there is little food, money, and hope.

Ida Jimmy Thaeiros wears the medal she received fighting for Namibian independence, for which she was imprisoned. After five years, during which she was tortured and her limbs broken, she went to work in a canning factory. Then she was fired for organising women to protest against their conditions.

Then there is Lena Nanguna, abused by an alcoholic husband who has several "love wives." She tries to feed, clothe and pay for her children's schooling out of the US\$45 a week she earns at the canning factory. After paying 20 rand a week for daycare for her youngest, there is not much left for food or rent of the shanty she shares with her five children.

Namibia's new constitution guarantees equality for women but they are still not allowed to own their own homes or get credit from a bank without their husband's permission. Children are regarded as dependents of the husband, who gets tax relief, whereas the wife, if she is a wage-earner, pays higher taxes although she is the one who bears full responsibility for the children's welfare.

Rape is a constant fear for women in the townships. "We can not walk outside after 7 o'clock at night," says a woman nursing a baby. "If you get beaten or raped at knife-point, the fact that there are no street lights makes it impossible to identify your attacker. At least if we had lights we could recognise him and report him to the police."

Earlier that day, at a meeting at Nautilus primary school teachers spoke of classrooms with 60 students and hardly enough space to move between desks. They spoke of raped and battered children, sparsely attended parent-teacher meetings, and the danger of visiting homes where parents have drug and alcohol problems.

The only well attended meeting had been one on child prostitution, when 100 parents turned up. At the junior high school, 27 girls were pregnant or had a child. As one teacher put it, "Parents wait for someone else to solve their problems because they feel powerless to solve them themselves."

But the women who had come to Nautilus primary school were different. They could feel the winds of change and they no longer felt powerless. Instead, they wanted to find ways of solving some of their problems.

UNIFEM was prepared to send trainers who would teach them skills that eventually would improve their economic situation. They were aware that Namibia's new Constitution protected their basic rights. And now there were tough, outspoken women in government who would see that changes came about. — GEMINI NEWS

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— Depthnews Asia