

Feature Development

Machinery Manufacturing and Economic Development

by M M Huq, K M N Islam, and N Islam

In recent years the machinery manufacturing sector in developing countries has attracted increasing attention on the grounds that "machine production lies at the heart of the processes involving the generation and diffusion of technological change".



serious hindrance to rapid capital accumulation and sustained economic growth. Moreover, the capital goods sector is one of the few sectors which has strong dynamic elements: firstly, it lays the foundation for raising the basic engineering skill of the workforce; secondly, besides producing machinery and other equipment, it is capable of producing much needed spare parts for a large number of industries; thirdly, an R & D capability, which is an integral part of the capital goods sector, is of considerable assistance in the adaptation of imported technologies and, thus, contributes greatly to the diffusion of technology; and finally, the process of import substitution, with its attendant demands for machinery and equipment, is likely to be constrained where the local capital goods sector does not develop.

The machinery producing sector, considered as being central to the production and diffusion of technical change, has received priority in the industrialisation strategies of almost all developing countries

which are now considered as newly industrialised or semi-industrialised. Indeed, in countries such as Argentina, Brazil, India, China, South Korea and Taiwan which have become important producers of machinery, Government policies have actively sought to promote the growth of the machinery manufacturing sector. The emphasis on machinery manufacturing in these countries reflects a strong belief that the growth of the capital goods sector is a precondition for achieving indigenous technological capability.

To date no extensive study has been undertaken of the machinery manufacturing sector in Bangladesh and there is a serious lack of evidence on the state of current indigenous technological capability. Some specific studies, mainly to help develop an appropriate tax structure, were undertaken by the TIP of the Bangladesh Planning Commission in the mid-1980s. For example, separate studies were conducted, one on metal working industries by Norbye, and two studies by Warner, — one on electric mo-

tors, and the other on diesel engines. An important message coming out of these studies is the need for correcting tax anomalies so as to enable capacity utilisation and also to expand exports. According to Norbye, "exports are important for the development of the local engineering industries because they permit large scale operations and better utilisation of machinery, equipment and skilled labour.... Moreover, subcontracting of fabrication of parts is also possible and in many cases necessary. In any case, local markets are small for many engineering products, and thus exports may prove to be necessary to reach an economical level of output." By comparing the policies pursued by South Korea and Taiwan with those in Bangladesh, Amaden found that "the Government of Bangladesh appears infinitely less supportive of the exporting efforts of local firms, including public enterprises. This appears particularly so in the case of subsidising local firms in their efforts to win international tenders for the foreign exchange component of aid financed projects." Warner identifies a number of basic problems which are also common to other capital goods producing in Bangladesh including high rates of taxation of imported raw materials; concessionary rates of duty on competing imports; fragmentation of the markets dominated by project aid financed procurement; and inadequacy of incentives to supply international tenders against foreign exchange. Siddiqui has also been very critical of government policy in the engineering sector. He examined the performance of the large engineering plants, particularly those in the public sector involved in production technology (foundry, press work, fabrication, heat treatment), product design and subcontracting, and found the performance of the sector highly disturbing.

In the recent past, the Bangladesh Steel and Engineering Corporation examined the issue of local participation in the construction of Jamuna and Karnaphuli Fertilizer Projects. While it was found that as much as 37 per cent of the total project work of large scale fertilizer plants could have been completed locally, there was nil or negligible actual local involvement.

The writers were associated with BIDS' technology project.

Profile of a Village Vet

by Kumar Rabi Deb



gardening, planted saplings around his home as well as rearing ducks and chickens. The chickens caused Profulla a few problems as rearing them went against his community's Hindu customs. Despite this, Profulla persevered and bought two goats. A year later, he was able to invest in two cows costing Tk 6,900 (\$170) from the in-

come of his vegetable, fruit and poultry sales. Profulla encountered a second problem rearing poultry and livestock — they often suffered from disease. The nearest veterinary clinic was 12 kilometers away and vaccines were seldom available. A far-sighted individual, Profulla went to his group's Organiser and sug-

gested he should be trained in livestock care. After a one-month course organised by RDRS, Profulla acquired the skills and knowledge necessary to be able to look after his own animals and those of his neighbours.

Using his group training in how to organise a business, Profulla maintains a register about the animals he cares for. In contact with the vet in Ulipar, he goes to the clinic for advice on complicated cases and to purchase medicines. Those the vet does not have, he buys from the marketplace.

In his community Profulla is now known as 'the veterinary doctor'. He has a small office in the local bazaar where he sits from 4 to 9 pm every day, where everybody knows he can be approached for advice and medicine. During the day, Profulla works his land and makes calls to other households to tend sick livestock. Carrying his doctor's bag on his bicycle he is a welcome sight in the village — the bag containing a few essential medicines was provided by RDRS. A good businessman, Profulla now has a monthly income of Tk 2,300 (\$ 58) from his veterinary work and has bought or leased a total of another 0.43 acres of land for his family, costing him Tk 14,800 (\$ 350).

From a penniless boy, Profulla has become a respected and important member of his community, thanks to his own commitment and some help from RDRS. His village now enjoys low-cost veterinary services by a trained local man. But he is not someone to sit back and make do with what he has. Profulla's ambition is to receive more training for, as he says, "there are many more problems here than I can solve just now."

— RDRS

Caritas Works in Promoting Universal Solidarity

by Sharier Khan

DIRECTOR of Caritas Italiana Rev Giuseppe Pasini came to Bangladesh recently with a message of love for all who aim at helping people in the development process and making them aware of their rights.

The Caritas Italiana is presently funding the construction of 66 cyclone shelters and 24 schools buildings in remote coastal districts of the country of which, 18 cyclone shelters and 22 school have already been completed.

"The fund we are using in Bangladesh has exclusively been raised from the people of Italy following the devastating cyclone in Bangladesh which killed more than 130,000 people in late April 1991," Pasini told the Daily Star in an interview in the city.

Besides the Red Crescent Society the Caritas is the only NGO in Bangladesh that built 12 well fortified, highly durable cyclone shelters in 1986-87. Eight came into use and offered protection to 2,500 persons each on the deadly night of 29 April 1991.

"Usually Caritas does not construct things to help people but it concentrates on aiding people in education, health, legal rights, human rights and women rights," Pasini said in his mother tongue which was translated into English.

"But in the case of cyclone, the Caritas workers worked extensively in the affected areas and asked the people what their prime needs were. Almost everyone answered they needed cyclone shelters first and school premises next," he thoughtfully pointed out.

"The Caritas Italiana, one of the 130 other Caritas organisations in different countries of the world, then launched a campaign. The aid for the cyclone shelters amounts to about \$US 10 million dollar."

In addition to the cyclone shelters and school premises which also serve as shelters during any natural calamity of the country, the Caritas had used some of the fund in coastal embankment and tree plantation in the construction sites.

"For each cyclone shelter we have employed 100 people com-

prising supervisors to labourers, which means we have totally employed 6,600 persons in the 66 construction sites".

The mother organisation of the Caritas organisations around the world is the Caritas International in Vatican city which was set up in 1945. The purpose of this non-government organisation is to maintain the link between different Caritas organisations and set up new ones in different countries.

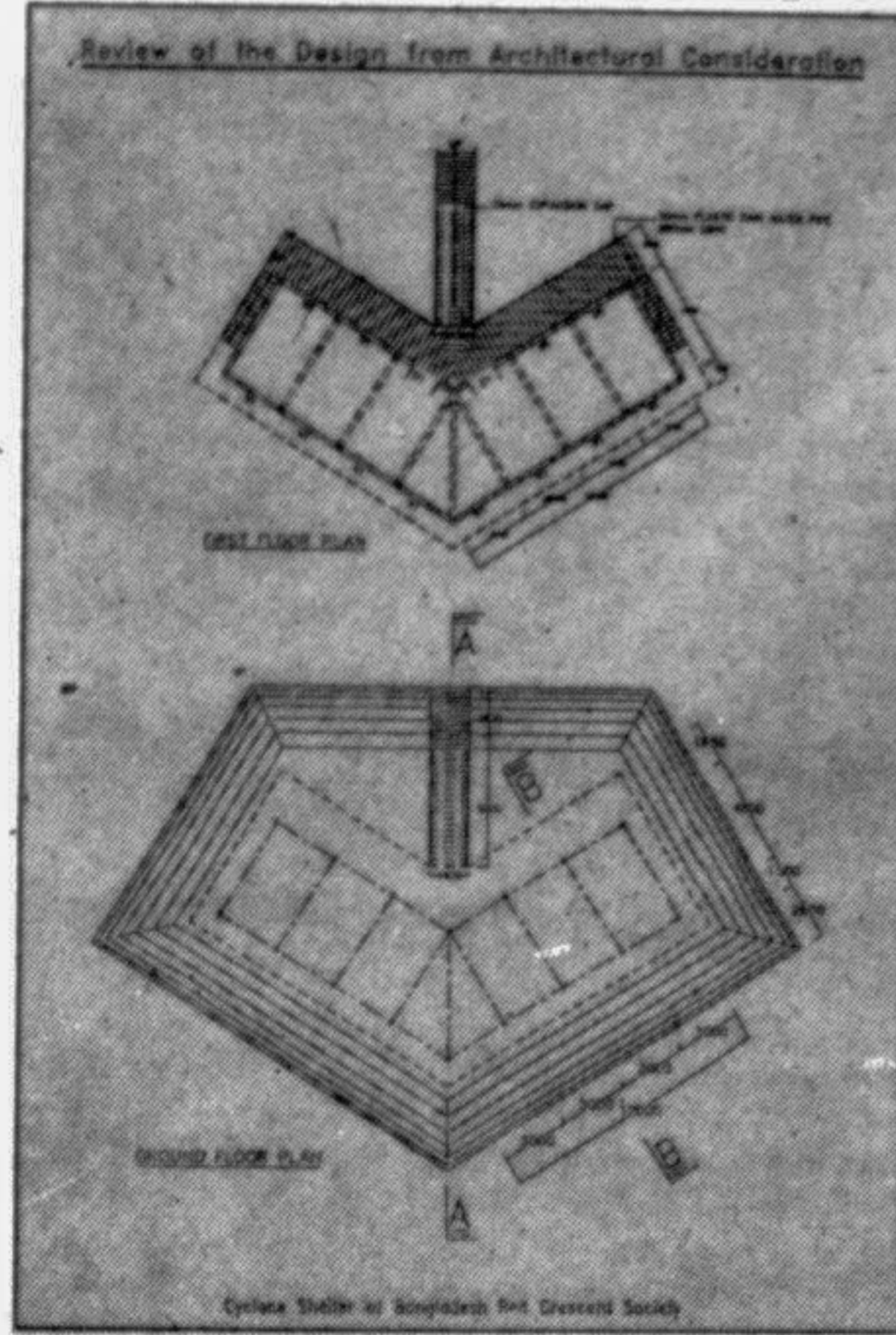


It also maintains the philosophy of love linked with the Gospel. "The character of this love does not only mean our commitment to assist people grow but also help people to become conscious of their rights and values," said Pasini.

"The Caritas works everywhere to promote a universal solidarity from the grassroots level. The love, according to our organisation, is secular from the point of view that we want to create a universal solidarity of the mankind."

"We are against any kind of conflict, be it communal or political. We believe war can never be a solution to problems. We work to build a violence-free society," the Italian reverend said.

In the international area of conflicts, the Caritas is always working for the distressed irrespective of race and religion. "We are working in Bosnia,



Croatia, Somalia and anywhere there is a conflict. We extend help to victims, send them food, medicine and other essentials. We have recently helped people in Bosnia to rebuild a village which was destroyed by the army. We help them, so that the people can overcome the hatred against people."

"We have noticed growing hatred between the Muslims and orthodox Catholics in Croatia and Bosnia. We preach the message of peace in that region and encourage the leaders of both the conflicting groups to talk the problems out. We have pressurised the UN to intervene there," Pasini said.

"Bangladesh, as I have noticed during my short visit and as I have learned is free of any sort of communal conflict so far. But we should all be careful not to let such conflict arise," the Italian visitor said.

The Director of the Caritas Italiana along with an engineer, Pietro Pericoli and Dr Ferruccio Ferrante, visited the cyclone shelter construction sites in Bagerhat, Khulna and adjacent areas and expressed his satisfaction at the progress of the construction works.

"The cyclone shelters can also be used as health care centres and education centres when there is no cyclone and during the cyclones it can safeguard at least 2500 people each," he informed.

The Caritas Bangladesh is already working in the fields of rehabilitation and promotion of human resources, the Caritas Italiana is only helping it to build the shelters and the schools. We believe the National Caritas of Europe is ready to help the Bangladesh Caritas in different projects," he further pointed out.

"The NGOs in Bangladesh, I think should be able to accelerate further their activities and they should be more dynamic than they are at present," the Caritas Italiana Director commented.

Highlighting on the concept of development of the Caritas Rev Pasini said, "the ideal attitude of the NGOs should be not to provide distressed people with money but to help them realise their rights and defend them in case of social injustice."

Wrong Aid Prescription in Russia

by Adam Tanner

WHILE many Russians are dying because of the simple lack of medicine, the West continues to flood the ex-Soviet Union with food aid that the country does not need.

Minigali Almirov, a 50-year-old welder, died here after an operation to treat blood vessels — which were caused by his failure to secure routine follow-up medication, doctors say. "There are medicines that could have helped him," said attending doctor Tatyana Galeyeva. "We feel guilty in our souls because we could not give him everything he needed."

"The sick are dying and the West is sending us canned food," said Alfiya Ismagilova, assistant director at City Hospital No. 6 in this Ural town, 1300 km east of Moscow. "We don't need that. What we need are medicines."

In 1992, the United States, the largest food donor, Germany, the largest drug donor, and the European Community donated an estimated total of US\$574 million in food aid, more than twice the US\$236 million granted in medicines.

The Western emphasis on food aid is a classic case of the aid community reacting to last year's perceived problem, rather than anticipating future problems.

The food aid drive started in late 1991 when there were fears Russians would starve as the country switched to market economic policies in the dead of winter. The fears were never realised.

"If we didn't get this aid, of course, we would survive any-

way," said Lydia Salodina while accepting handouts of US powdered milk in Polesvskot, a town of 80,000 in the northern Ural. Neither she nor her friend Natasha Shakhmina told officials their families tended milking cows.

But in the past year, health officials say the medical situation has grown worse because Russia was forced to pay world prices for medicines it once received cheaply from eastern Europe and the former Soviet republics.

Regional health officials say they are waiting for Moscow to

crease tenfold this year. But he admitted that food remains the dominant humanitarian aid contribution to Russia, with donors quadrupling shipments to 1.8 million tonnes this year.

Red Cross spokesperson Benedicte Berner blames Washington — which provides a third of all food aid to Russia — for the overemphasis on food aid, although Taiwan, the EC and Britain also contributed large quantities of food last year.

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But in far-away Moscow, Georgy Maltin, the official overseeing Russia's aid distribution to the provinces, blamed regional hospitals for failing to supply themselves.

"We are increasingly understanding that only we can help ourselves," retorted Zulfar Murtazin, deputy minister of health for the semi-autonomous Republic of Bashkortostan around Ufa. "We need technology to make our own medicine here."

Maltin meanwhile said the West has been slowly increasing its medical aid, and medical donations are expected to in-

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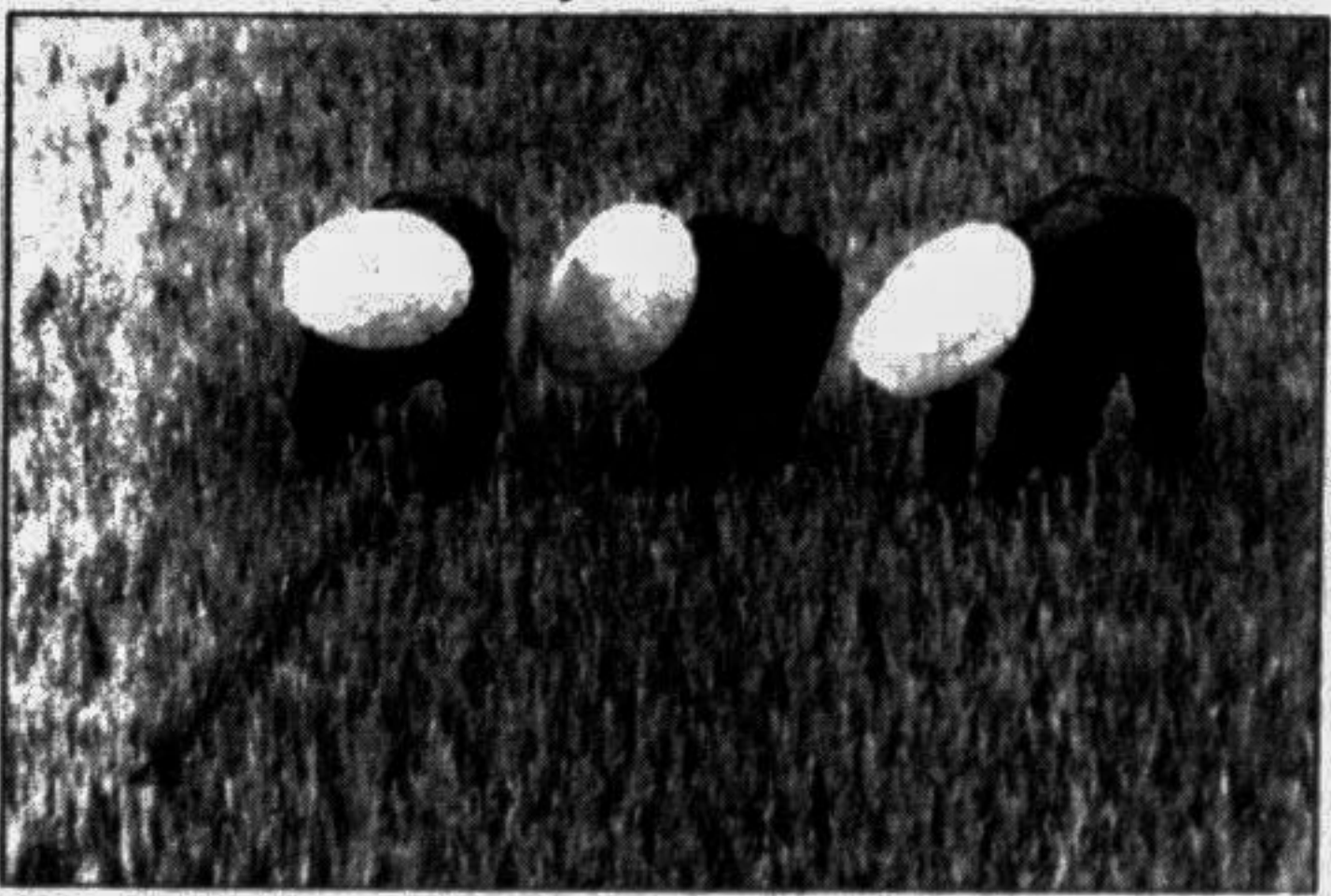
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Genetic Loss Could Cost the Earth

by Peyton Johnson



percent of their needs." Genetic diversity in agriculture enables crops and animals to adapt to different environments and growing conditions. This diversity accounts for the

abilities of plant varieties to withstand drought or floods, grow in poor or rich soil, resist pests and plant diseases.

Biodiversity is also indispensable to medical science. Of all prescriptions filled in the United States, for instance, 25 per cent of the substances therein are extracted from plants. Another 13 per cent comes from micro-organisms and three per cent from animals. Khan says: "The continuing loss of biodiversity is as much a threat to human health as it is to world food production."

Scientists believe that in this century alone, about 75 per cent of the genetic diversity among agricultural crops has already been lost. Throughout history several thousand plant species have been used for human food. Today only about 150 are cultivated and just three — wheat, rice and maize — provide about 60 per cent of all the calories and protein derived from plants. This is too narrow a base for safety. —Gentini News

