HE BADC does not have

BADC were originally to develop

agriculture by distributing

power pumps, tubewells, diesel,

fertilisers, HYV and improved

seeds among farmers through-

out the country. Like BWDB

there was no demarcation of

project boundaries, nor was

there any need to acquire lands

to develop BADC schemes. Any

number of farmers possessing

lands become eligible to form

the primary farmers cooperative

societies and get various agri-

cultural inputs from the BADC

on rental or procurement basis.

Let us now analyse the

achievements of the past and

present operative equipment of

BADC. During the last 30 years

2.5 lakhs of DTWs, STWs and

LLPs have been commissioned.

During this gap, 62000 equip-

ment have already gone out of

order. Whereas with the utilisa-

tion of 1.90 lakhs DTWs, STWs

and LLPs during 1989-90, 32.2

lakh acres have been irrigated

in the same year. This means.

each equipment has irrigated

16.9 acres on average annually.

Before 10 years in 1979-90 by

utilising 58000 DTW and LIPs.

24.1 lakh acres were irrigated

in this year. This indicates.

each equipment irrigated on

average, 41 acres in a year, and

this was more than double in

the last decade. It has also been

found that in the last three

decades, out of the total num-

ber of the tubewells, 40 per cent

of the STWs and 30 5 of the

Shortage of water

that the BADC authority does

not always maintain the exist-

ing rules of installing deep and

and shallow tubewells at the

proper place and proper dis-

tance between the two tube-

wells. The distance between the

tubewells may not be the same

at all places. It varies according

to the level of ground water and

recharging capacity of the soil

column. Having a deep ground

water level and permeable soil

layers, the distance between the

tubewells will be relatively

shorter, compared to those ar-

eas where ground water depth

is shallow and solid layers are

less permeable. By installing

tubewells at closer spacing, the

tubewells become ineffective

after one to two years of contin-

ued operations due to the effect

of draw-down of the aquifer be-

low the installed pipe. In ex-

treme cases the newly installed

tubewells become useless after

There is no denying the fact

DTWs have become ineffective.

the projects like BWDB The functions of the

'Farming First' brings Miracle in DPRK

by Dr Kamal Uddin Ahmad

This is the first instalment of a two-part article in which the writer explains the 'agricultural miracle' of DPRK and draws the attention of the policy-makers of Bangladesh to share the experiences in formulating agriculture strategy.

EMOCRATIC People's Republic of Korea (better known as North Korea) is known lesser in the world at large, as compared to Republic of Korea iotherwise known as South Korea). To may, Korea means South Korea. This is because of South Korea's openness or accessibility to the outside world, its market economy, its adherence to USA and its recent emergence as one of the newly industrialized countries (NIC's) of Asia. In contrast to that. North Korea tended to remain obscure and generally inaccessible to outsiders, as it followed centrally planned economy, adhered initially to USSR as a friend and a philosopher, if not

as a guide. Paul Raffaele (1979), a correspondent for Australian Broadeasting Commission, called North Korea as 'Communism's iron Land', designating it as "one of the world's most remote and forbidding states". As S M Hossain (1986) wrote, "We have heard little of the situation in the North, which chose to steal itself from prying Western eyes. This isolation has inevitably shrouded the North in mystery and established it in the Western minds as a bogeyman amassing military hardware and aggravating tension in the

The so-called isolation of the country has kept the outside world unware of many good things that are happening there. One of the most astonishing achievements has been in the field of agriculture. Like many others. I would not have believed them, had I not myself visited that country. Nothing is

like 'Seeing'. North Korea occupies the northern part of the Korean Peninsula, after becoming independent from Japanese occupation of 35 years during 1910-1945. The end of world war II in 1945 not only contributed to the creation of two independent states out of one along the 38th parallel, but also brought in conflicting political systems of socialism in the north as influenced by the Soviets and capitalism in the south as promoted by the Americans. North Korea, with an area of 121 thousand square kilometre, is about 55 per cent of the peninsula, but has nearly 22 million people

their interest. They pay more.

have less choice. This is true.

naturally, for all countries. The

Institute of International Eco-

nomics calculates trade restric-

tions enforced by US authorities

cost US consumers more than

India, is one of those coun-

tries which have recently

opened their market (at least

partially) having had to learn

the hard way this is healthy for

the industries as well as the

economy. Efficient manufactur-

ing groups have seized the op-

portunity. But many Indian

businesses had long been com-

peting internationally! Escorts

sold US and German tractors.

then founded its own tractor

plant in 1961: a success from

the first production! Blow Plast

Ltd. luggage manufacturer

weathered heavy competition.

including the American Touris-

ter. Now it is the second largest

in the world: sales in 1991 were

worth nearly \$ 30 million. While

stability of law and order as well

as the political environment is a

necessity for free trade to flour-

ish, in certain countries the volatile political situation

sometimes does not pose a

problem given the market reali-

ties. China has not only ab-

sorbed the Teinamen incident

(though some of the world will

not let it die down anymore

than Pearl Harbour or the Black

hole of Calcutta but also come

out of the socialistic experiment

far better than the European

counterparts, specially the for-

If free trade is so rewarding.

how come hindrances litter the

path from Japan, India, Europe

(specially the EC countries) to

USA? The answer lies with firms

that fear competition having

created a captive or monopoly

market in the home country

with the collaboration of politi-

cians who have a share in some

shape or other in those enter-

prises. There are also politicians

who know the benefits of free

mer USSR.

\$80 billion a year or \$1,200 ev-

ery family.

compared to 43 million people in the south.

The country is rich in miner als like graphite, tungsten and magnesite, and has deposits of coal, lead, zinc, iron-ore, copper, gold, pyrite and phosphate. But it started as a very poor nation in the matter of agricultural production.

Before liberation, crop production was being done mainly in the south, while the north's emphasis was on livestock breeding. Obviously, the very first task of North Korea was to devote to the production of food crops in which it was so deficient. In 1944, the production of cereals such as rice was to the tune of 2.2 million tons

Suddenly North Korea found itself bereft of Konam plain of

135

task is agriculture. Eating should be the first and foremost item in our programme, even before housing and clothing". His "Farming First" policy went a long way to bring in an agricultural miracle in North Korea.

Mechanization With the development of the system of cooperative farming, which brought the smaller plots together into larger blocks (usually, one hectare in size). rural mechanization was introduced in a big way. The invention of North Korea's own "Challima" tractor paved the way for all other machinary to be manufactured within the country. Presently, according to Mr ld Man Sung (Agricultural Councillor), in DPRK's rice-cultivation), 100 per cent of

tries. As Mr Id Man Sung stated, "Our Great Leader's (GL) and the party's intention was to relieve the farmers from hard work. So a challenge was thrown by GL at the country's agricultural scientists and engineers to develop a riceseedling transplanter. Efforts were made by them with so much seriousness that finally the rice transplanting machine was invented, as the riceseedling pickers, harvesters and threshers were also developed". This is a unique example of the head of the state's scratching his head for farmers' welfare and mechanization of farming practices.

job of rice-transplanting too

with the machine is a big news

for many rice-producing coun-

Irrigation System

North Korea has been following an irrigation system that allows almost every rice-field in the country to be provided with irrigation water, and the excess water drained out. A major part of the system is the building of huge reservoirs at levels much higher than the fields, pumping up water there from rivers by means of Korean-made giantpumps and storing the water there for eventual distribution via canals. According to North Korean Agricultural officials. there are about 25,000 pumping stations with reservoirs having a total capacity of 3000 miltion cubic metre of water, attached to 40,000 kilometers of canals. Reservoir-water covers about one-half of the total irrigated are that stands at about two million hectares (rice: 1.4 m ha, non-rice crops-0.2 m ha. orchard/mulberry-0.4 m ha).

The area of land that is irrigated per one thousand people is also a measure of agricultural-production efforts of a country. North Korea has a leading position in such an enterprise, among the south and south-east Asian countries. covering as much as 543 hectare of land with artificial irrigation per 1000 population. compared with 510 ha in India, 424 ha in Indonesia, 408 ha in China, 320 ha in South Korea, 253 ha in the Philippines and 202 ha in Bangladesh.

The writer is a former Member-Director of Bangladesh Agricultural Research Council.

Need for Rethinking on Irrigation Policies

by Dr M A Sattar This is the final instalment of a two-part article, in which the writer investi-

gates the present policy regime and presents a second thought on it.

a few months of operation due to scanty water left in the underground layers. As a result the transplanted Boro, vegetables and other crops suffered tremendously at the peak growing period.

It is estimated that during the last 17 years of operation since inception 138000 were installed of which 54000 STWs i.e. 39 per cent have gone unutilised. Again 31000 DTWs have been installed during the last 30 years of which 8600 DTWs i.e. 28 per cent have become unutilised due to drawdown effect of the aquifer and poor maintenance facilities.

Lack of sufficient fuel and electricity

The power pumps, shallow

hampering the regular supply of irrigation water for growing crops. The electricity cost runs very high because the charge is usually imposed on farmers even if the irrigation equipment does not function in the lean period

Inadequate repairing facilities

Previously, farmers used to get better service facilities through routine visits of the BADC engineering staff and their regular checking and repairing pumps and tubewells. As the pumps and tubewells have now become the sole property of farmers. BADC has no responsibility to check, repair and maintain them unless they are requested and paid for the



Farmers ploughing in irrigated fields.

tially operated by diesel when no electricity existed at the sites. At present a large number of power pumps, shallow and deep tubewells are operated by means of electricity. In many places power pumps and tubewells, already driven by diesel have been converted to electrically driven engines. In places having no facility for electrification irrigation units are still operated by diesel as before. The advantages of electrically driven irrigation units are that their operational costs are almost 30 to 40 per cent less than the costs of diesel operated units. Besides advantages, there is also the disadvantage of occasional power failure, thereby

Heavy electricity charge

Farmers are quite eager to pay the normal electric charges per month for the operation of pumps and tubewells throughout the irrigation period of crops. But they are not ready to pay the fixed amount of electricity charge during the lean period when electric current is not at all consumed by farm-

What they can pay most is the meter rent for that idle period. By paying such undue electricity cost total irrigation charges go much higher than the total diesel cost and that is why farmers are not interested

to use electricity in place of

Lack of extension facilities

direct extension facilities under

Unfortunately there is no

BADC as because it distributes fertilisers and improved seeds. and irrigation equipment & their aids among farmers, and does not have the project concept of irrigation like BWDB. The area under irrigation for the individual pumps and tubewells vary not more than 10 to 100 acres. After commissioning the equipment in farmers fields it has become the responsibilities of Block Supervisors of the Agriculture Department to properly look after the use of water from each equipment. Each Block Supervisor who generally commands at least 1000 acres under his jurisdiction is closely connected with so many agricultural activities. The activities are the assessment of HYV seeds, fertilisers insecticides, and distribution of these inputs among different farmers. They are also to arrange extension training for model farmers and managers. Ultimately they are to evaluate the progress of individual crop areas and their productions and submit them fortnightly to their senior staff for information and guidance.

After doing all these activities the Block Supervisors hardly find opportunities to see the existing irrigation condition of individual farmer's plot. Hence the irrigation extension work for the installed BADC equipment is not properly supervised by the B.S of the Agriculture Department. To avoid this difficulty there should be an independent irrigation staff like BWDB, either inside the BADC or inside the Agriculture Department.

Lack of strong farmers association

To use appropriate amount of water, farmers associations are absolutely necessary. All these associations should be quite active and strong to see the interests of large, medium and small farmers who are the members of the associations Each association will supervise the water distribution system if properly executed by beneficiaries using water on rotational basis in conformity with the crop requirement. These associations cannot be formed unless some special number of irrigation extension staff are engaged in the field under the Agricultural Extension Department.

Free Trade must not Suffer from Double Standard REE or unrestricted

Fig. 1. Number of tractors per 1000 ha cultivated land,

and U.S.A. in 1988.

the south, whose one-year's

food production was said to

have been adequate for two

President's Personal

Attention

1912 and was a pivot in Korea's

liberation movement and an of-

ficer in the Communist Red

Army till 1945, came to hold the

helm of affairs of the country as

its first and so far the only head

of state since the Democratic

People's Republic was estab-

lished in 1948. Unlike Prime

Ministers and president of

many countries. Kim Il Sung

(later on fondly called as the

'Great Leader' by his compatri-

ots) put an absolute emphasis

on agriculture, possibly un-

paralleled in the history of

mankind. He said. "My first

Kim Il Sung who was born in

year's need to entire Korea.

in N. Koma compared with some developing countries

machines.

Bangladesh.

ploughing-harrowing, seedling-

picking, threshing and trans-

portation and 95 per cent of

transplanting and 70 per cent

of harvesting are now done with

gaged in agriculture in a coun-

try can give a fair amount of

idea about its extent of mecha-

nization. According to FAO

(1989), North Korea has the

largest number of tractors per

1000 hectares of land, among

all the developing countries of

the world. DPRK's such number

of tractors are more than 32, compared to 11.5 in South

Korea, 17.5 in Egypt, 14.5 in

Libya, 16.8 in Cuba, 23.6 in

Turkey, 15.3 in Shri Lanka, 9.1

in China, 8.8 in Pakistan, 4.5 in

India and only 0.5 in-

That North Korea does the

The number of tractors en-

by Jamal Arsalan

trade cannot be adopted by all countries at any trade but do not wish to lose moment without preparing the votes because free trade causes ground. But it will have to be the ultimate goal since it is becoming the working en vironment in global trade. in Europe the opening of markets is not a gift to the Japanese or any competitor, for the world market is not closed to Europe. If the Japanese succeed in Europe, the Europeans can profit elsewhere including Japan (where a number of firms are doing very well). Denying any product to the European citizen or any consumer harms

all countries, who have been coddling or bottle-feeding some. part of the economy in the form of subsidies or tariffs to deter import, to lose a large number of jobs and organisations. Since these countries do not have a clear idea and experience of the effects of a free market economy, they do not realise theat lost jobs and enterprises closing down in one sector is balanced out by better jobs elsewhere. 'Better', because the quality that drives away the local inferior service or product

pressured by weaker firms (but with powerful political lobbying clout) to set up trade barriers. How 'much' free trade and how 'fast' are questions being asked by countries worried about rising unemployment. And free trade's pains - which should be carefully, ceaselessly eased as far as possible - are

more beneficial both to the consumer and the producer. Restricted free trade in any disguise only delays the day when the economy has to be 'set loose. Of course, artificial prosperity occurs - US and Japan are best examples - when

If free trade is so rewarding, how come hindrances litter the path from Japan, India, Europe (specially the EC countries) to USA? The answer lies with firms that fear competition having created a captive or monopoly market in the home country with the collaboration of politicians who have a share in some shape or other in those enterprises. There are also politicians who know the benefits of free trade but do not wish to lose votes because free trade causes all countries, who have been coddling or bottle-feeding some part of the economy in the form of subsidies or tariffs to deter import, to lose a large number of jobs and organisations.

can match or even outdo international competitor. Where the world is the market, free trade also involves migration of the company or factory to another country. Jobs are lost as not all employees are willing to re-locate abroad: which has cultural, health, psychological problems the employee cannot cope with unless helped by the firm, the host country and concerned agencies. Importantly, competition often causes some businesses to change their nature of work altogether. And since most people do not like change, free trade scares them!

Restraints on free trade and protection of the home market have adverse effects. Firms which compete successfully because of free trade best comprehend the profit of free trade. USA's heavy equipment maker. Caterpillar, is firmly opposed to steel and ball bearing import restrictions for this increases its production costs. In other sectors also. US businesses do not profit from such limitations that allow only 350 tons of alloy steel from Poland or 7,730 tons of sugar from Haiti for the whole year to meet the US need. Germany's BMW and Mercedes Benz export cars to Japan, so they want EC's auto market to open up fast. But EC is being

there is a 'mixture' of free trade and 'meaningless' controls. And the 'price' of artificial controls ultimately have to be paid.

The EC is making Eastern Europe to take the place of the Japanese as an economic entity that will cause unemployment and closure of firms. Such fears are pure nonsense according to EC's free traders. Developing countries like the

East European states want a fair market for their quality products, not aid. Money that such developing countries earn is generally used to buy goods from the developed world including Western Europe. So both sides (including Asian, African, South American countries) benefit - a situation absent when restrictions are imposed. In effect by putting up trade barriers developed states. which have been helping developing countries to attain high (standard) productivity, block the developing countries' access to the developed market. So what developing countries would do - dump their goods in the oceans? This deprives their own citizens or consumers as much as the producers in the developing countries.

Each and every youth is not meant for 'academic pursuits',

some prefer to earn their living. This is a need not only for the family but even more for that particular youth's own satisfaction. For any such young person to 'labour' at studies, instead of 'labour' for money causes what is termed juvenile delinquency - a very prevalent malaise in the developed world. to say nothing of the unpleasant rate of youthful drug addicts and outright suicides.

Agriculture is another sore

point for free trade. Let alone the developing agro-based countries, even in developed states from UK and France to Japan and USA, subsidised agriculture has made the consumers, specially the children and the elderly, suffer in terms of prices they cannot afford. Free trade ensures cheap and fresh agricultural products the year round! Unproductive farmers lose. But their case is no different from sick industries which must fold. If the consumer's expenditure is less, then there is scope for savings. And savings is what makes investment possible and a competitive service/manufacturing industry.

A decade ago USA's auto firms, including the three giants: Ford, General Motors and Chyrsler did not use their period of protection to be competitive like General Electric (GE) or Honda or Toyota. Import restrictions and the plunging dollar made Japanese cars expensive. US auto executives did not expand markets. Increasing prices artificially, they claimed to have 'earned' large profits and 'paid' themselves bonuses But the US consumers wanted those Japanese cars. They did not care about the high price. All the money went to the Japanese car makers, turning

them even more competitive. Those concerned with a country's economic workings will do well to remember that businesses go bankrupt without the presence of foreign competitors. Another country's firm should not be the scapegoat. Cheap imports save money. The resulting jobs are useful and better paid. Import wipes out useless jobs and goods. Free trade does not mean the disappearance of monitoring. In fact, more than ever both business persons and manufacturers as well as consumers have to band together to look out for various means of subverting free trade,

The writer is associated with Bangladesh Management Development Council.

Boosting West Africa's Self Image

of countries in the least V V developed category, escalating infant mortality rates and an external debt that is higher than total GNP, West Africa's image to the world is more than just bleak. It is appalling. What is not focussed on however, is the progress, albeit modest, that is going on in spite of all the odds which makes sub-Saharan Africa in a worst position than even poor South Asia. Moncef Bouhafa -Senior External Relations officer of Unicef in West Africa, believes that a grain of optimism could boost the development process. He mentions a few positive trends that should be

acknowledged. One of them, says Bouhafa is the trend towards democratization: "Many countries are going through the process of democracy; I think it is clear that in the end they will be greatly benefited since in a pluralistic society development is more sustainable.'

Another important development Bouhafa thinks is worth mentioning is the growth of community based development. One of the latest schemes is the community health scheme initiated originally in Bama Ko. capital of Mali. The project, now being successfully replicated in other West African countries, is unique in that it is managed and financed completely by the community that is directly benefitted. Although the government may provide assistance for minimum curative services, the people control their own health care. One of the results is better quality health services, previously a rarity in these countries. "The interesting thing," says the Tunisian Unicef Officer, "is that the immunity rate is now better maintained, it is proof that when the community manages its own health care system, it feels that it is its own and so runs it more efficiently. Bouhafa theorizes that this kind of community led development is the indirect result of governments that are too weak to ensure basic facilities to the people.

The third positive direction that West Africa has moved towards, is a significant expansion of privately owned media such as radio and print newspapers - a natural consequence of democratization.

Although as a first stage. this newly empowered press is a lot more focussed on political issues, Bouhafa believes that the private press can eventually

by Aasha Mehreen Amin

be persuaded to stress on development. In this respect. Unicef and other organisations have initiated various programmes to sensitize the media into playing a greater developmental role. Bouhafa savs that just as the Bangladeshi press has been doing, the West African media can be geared towards active training programmes

Currently Unicef has introduced two programmes. One is with FAO which is responsible for training radio journalists in French speaking countries. The

other with Netherlands, is for English Speaking countries: The projects are intended to help journalists understand better the issues of development so that they build social messages in their reports. In West Africa which has a strong oral tradition, the importance of radio activities should be especially focussed on, explains Bouhafa.

Bouhafa, who has lived in Bangladesh for about three years during the mid 70's as the first information officer of Unicef, pointed out that ex-

change between developing countries should be encouraged. Many of the challenges of West Africa are the challenges Bangladesh has faced he says. Bouhafa mentions a seminar in Niger where officials of BRAC came to speak on community development action in Bangladesh that later proved to be very relevant for Western Africa. "In the future, field staff from Bolivia and Ghana will come to see BRAC schools," he

Bouhafa stresses the need to boost the self image of these war torn, debt ridden countries - an ingredient that works as a catalyst in the development Thank You so much, Finker process. "If you look at just the grim statistics of Bangladesh, for example, you could easily conclude that the situation is hopeless; its the same in West Africa." "But if you look at the

> ful," he adds. Bouhafa believes that it is necessary to get these positive stories across. The answer again lies with the media, specifically, interactive radio a recent development in West Africa. This involves radio stations going to the people - literally. Mobile teams with microphones go into remote areas, stay for a few days and basically try to capture the culture. lifestyle and development work in those areas through interviews with the people. The team also records songs, dances or dramas performed by the people and then comes back to produce programmes based on what they have learnt in the villages. Bouhafa says that interactive radio has become very successful in spreading positive

> development that is going on

then the picture is more hope-

For countries like Liberia and Zaire, the development efforts, says Bouhafa, are being hampered by extreme emergency situations. With an unrelenting economic crisis resulting from huge debts, violent politics, high unemployment, long periods of salaries being unpaid and an actual fall in the immunization rate, development work for these countries is especially challenging. In the long run however, says Bouhafa as governments move away from the crisis of war the focus will be on development - something that is already happening in many countries. With the slow yet steady progress West Africa is on the way to becoming a lot more than the part of the world with the bleakest



How many rickshaws are there in the capital city? It must be something more than 200 thousand, anyway it must be far more than bicycles. The rickshaws have then at least 700 thousand wheels, add to that the member of wheels of bicycles which can be as many or as small as 200 thousand.

Who services these million wheels? It is said by the wisest of life scientists that symbiosis is at the centre of the success of life on this planet. Thanks to the wayside mender, the rickshaw-paddler and the bicyclist make their maintenance very cheaply. And the mender, some thousands they must be, gets a living out of it. Schumacher, the 'small is beautiful' prophet, would simply have loved to know this no-capital tinker-man.