# How 1,700 Companies are Plundering Water

Stephen Carr writes from Indonesia

I IGH on the agenda of the Indonesian govern-I ment is protecting the people. Under new legislation those guilty of damaging its physical resource can be jailed for ten years or fined 100 million rupiah

One resource most raisused is water. Deap in thigh laws thousands I companies con timue to use water illegally. In the Bandung area alone more than 1,700 textile factories are guilty. Every company sinking a well is supposed to get official permission.

Factories are restricted to using 100 litres a minute for 15 hours a day. In practice companies either have no licenses for their wells, or operate more wells than they declare, or use water at a faster rate than allowed. A 240-litre rate per minute is common.

Statistics for 1970 show that the Bandung area consumed 10.5 million cubic metres of water. The 1990 figure was 46.5 million cubic metres. Every year the groundwater level in the Bandung Basin drops between one and two metres. If these trends continue the Bandung Basin, a 2,200 square kilometre area, will have exhausted its groundwater some next cen-

Another problem about using deep aquifers is that shallow

**Tapless** 

cause of the number of government agencies, provincial and national, concerned with water "If I listed ten different institutions it would be too few," says Kirchhof, who is looking at ways of improving West Java's water resources.

In the matter of granting licenses the three main players are the West Java Government,

Water, one of the earth's most important resources, is often used indiscriminately. Bandung in Indonesia is a case in point. Its deep aquifers are being plundered. Every company sinking a well is supposed to get official permission, but laws to protect the resource, reports Gemini News Service, are being flouted and

the Ministry of Mines and Energy and its offshoot in Bandung, the Geology Directorate. There is confusion and conflict between them over what role each has in giving permission for water extraction.

Daud Silalahi, an environmental law water expert, says although the West Java Government is drafting laws to proeral textile firms which have been using water illegally. It has also said that bribe takers among its own ranks will be punished. Bribery is all too easy. West Java Vice-Governor Survatna Soebrata said officials were often negligent and businessmen could bribe them "even with cigarette money."

One disincentive for companies to go legal is that they would have to install water level recorders in their factories These units are expensive, cost ing around 40 million rupiah each. If "negotiation" with inspectors is a cheaper option they often take it. In West Java. only 37 companies have water recorders on their premises.

Unannounced inspections on factories in the Bandung area revealed that one company had seven water sources but was only licensed for four. The owner of Sinar Makin Mulya, a dyeing factory at Cimahi. claimed he had three pumps. The inspectors found six. Another dye plant, Jasa Sandano Raya, tried to conceal the amount of water it was using. One firm was found to be using 500 litres of water a minute instead of the permitted 100

Of ten companies inspected



## Population without safe drinking water

Central African Republic 87% Guinea-Bissau 82% 63% Bangladesh Afghanistan Burkina Faso Mozambique

1,400 million people

1,200 million people fack safe drinking water aguifers can then seep into the

deeper deposits. Many sallow aguifers, at 40 metres or so. have been polluted by domestic waste, agriculture and industry.

Why cannot this resource. on which everybody depends, be better protected? It is not for lack of personnel assigned to it. There are 255 chill servants in with man-

agement " v resources. Wolfgang Kirchhof, an engineer with a German aid project, says getting data is difficult be-

PRK is said to have rea-

ched one of the highest

levels of perfection in

providing the crops with

nutrients. The amount of

a particular type of crop is

decided on the basis of soil

analysis of every piece of land.

According to Mr Id Man Sung.

there are two million soil-

fertility eards for two million ha

of crop-land of the country, at

hectare. Although a great

amount of labour and chemicals

are spent for maintaining these

cards, they pay the dividend

erage, about 750 kg of fertilizers

per ha, which is one of the

highest in the world. A lot of or-

field by composting almost ev-

ery plant and animal refuse

that they can lay their hands

forgotten. The country and all

major cooperative farms have a

soil analytical sta-

tion/laboratory, where the work

is done by farm technicians and

Electrification

By developing hydro-elec-

tricity from many rivers in the

hills and harmonizing it with

thermal/power stations it has

been possible to provide every

house (both urban and rural)

with electricity. Electricity is

used for various production-

purposes like water lifting, rice-

milling, chopping of feed, heat-

ing, hatching in poultry,

chicken raising, drying and pro-

cessing of crops and seed

treatment. Now the total

amount of electricity used in

agriculture is said to amount to

13,300 million kilowatt per year

out of a total of 41,000 million

kilowatt. Every house has got

TV sets. As Mr Id said, "All

these have resulted in joyful

working for the farmers. All

farmers are thankful to Great

Leader and Dear Leader

(President's son, Kim Jong II)".

students of agriculture.

on. The micro-nutrients are not

ganic matter is placed in the

For rice, they use, on the av-

very well.

tect the environment, many staff supposed to apply the laws do not understand them.

Silalahi said: "It's an unprofessional bureaucracy." He works at the Environment Ministry and has recommended that companies which break the law should have criminal cases brought against them. It would be a bad precedent if such companies were not tried soon, he added.

The West Java Government is preparing cases against sev-

had full and proper licensing. The abuses will probably continue until water conservation laws are seen to have "teeth". The West Java Supreme Court says it will try illegal water users. Groundwater in the Bandung Basin may have some chance of protection when

> pearing behind bars. STEPHEN CARR is a British freelance writer currently living iri Indonesia.

greedy factory owners begin ap-

## Interview with Swedish Minister for Int'l Dev Cooperation A Ray of Hope at the End of the Tunnel

by Rashed Mahmud Titumir WEDEN is one of the few front-ranking European nations who recognised For 1993-94, the financial Bangladesh soon after the war assistance amounts to 120 mil-

of liberation. Since then, it is closely associated with the country's development efforts. (NGOs)

As part of that effort of bilateral cooperation spanning over two decades, Swedish Minister for International Development Cooperation and Human Rights Issues - Alf Svensson paid a five-day-long visit to Bangladesh last week.

After completing the graduation from University of Lund. Svensson joined politics and became a member of city council. A decade after his gradua tion, hé was elected President of the Christian Democratic Party. During 1982-1985, he served the Parliament as a member. From 1991, he is carrying out the same portfolio as a Cabinet Minister

The minister, during his tour, called on the Prime Minister and the leader of the opposition, had meeting with several ministers, and visited various Swedish aid projects.

The visiting minister, just prior to his departure from here, talked to The Daily Star The interview follows

The Daily Star (DS): How do you view the existing bilateral development cooperation between Sweden and Bangladesh?

Alf Svensson (AS): Swedish development cooperation with Bangladesh started immediately after Bangladesh's independence. At that time, import support constituted the major share of the total assistance.

During the last few years, Swedish cooperation with Bangladesh has gradually changed from import support to project aid.

lion Swedish croner. Besides, Sweden also supports national Non-Government Organisations

DS: After your five-day vistt and discussions with the top

Women in Bangladesh face problems of many types. They do not enjoy equal rights and their social and economic status makes them extremely vulnerable.

In the economic sense. they are not given equal opportunities for employment, nor are they given equal pay for equal work. In the social sense, women here suffer from traditional institutions that discriminate against them.

Thus Bangladesh faces a lot of problems, which it must solve in the coming years, if it wants to become a part of the dynamic future.

officials, what new frontiers are going to be opened up? As : I am hopeful that the

assistance is likely to increase. I am particularly interested in building up physical infrastructure. I will put emphasis on improving the rural infrastruc-

ture - roads, bridges, and boat landings. The different infrastructure, if created, may ease the problems of transporting farm produce and goods between producers and consumer markets. At the sametime it may opens up the countryside

meaningless. The rate of dropouts is alarming. This is not ac ceptable for a country willing to develop its human resources.

So, we are ready to provide expertise and resources for building up infrastructure and



for human interaction, which is equally important for creating a congenial atmosphere for ensuring development of the

Secondly, I will put emphasis on the education system. Development without education is carrying out educational activi-

DS: You are Minister for Human Rights Issues too. How do you assess the human rights situation in Bangladesh?

ing. However, the situation of

women is vulnerable. Women do not really enjoy equal rights here in Bangladesh. There is lack of respect for women. Here, women suffers from double exploiting. - as women within a traditional patriarchal society, as a poor people in a highly polarised and corrupt class in society. They are beaten up, even lashed to dealt by village courts

DS: Earlier, Swedish people expressed their deep concern over Chittagong Hill Tract's issue. Now. what is their position?

: We know about the tension. I shall not condemn the situation as Bangladesh is going towards institutionalising democracy. I am happy to note everything is on the right track.

DS: Would you please share your experience about Bangladesh and its people with us?

I visited Bhola and Faridpur | talked to the people they are very generous indeed. met the Prime Minister and Leader of the Opposition in the Parliament I think Bangladesh is in the right track in regard to parliamentary democracy.

I am satisfied with aid utilisation in Bangladesh. Situation has improved now compared to previous years. I heard 10 years ago the aid utilisation was not satisfactory, there were problems at that time. But now it is

really good. Let us see everything in a positive way. I am hopeful about the progress and prosperity of Bangladesh. I hope to see a new Bangladesh after five

to 10 years How could you expect such a poorer country like Bangladesh without problems? However there is a ray of hope at the end

of the tunnel DS: Thank you for sharing AS: The situation is improvyour views with the readers. AS : Thank you.

## Three approaches to the Political Economy of Development and large space", and the unit

HE present essay in tends to compare and contrast the three dominant schools in the political economy of development: namely, modernization, dependency, and the word-system theories.

**Modernization Theory** 

Modernisation theory sees the European experience as the ideal path to human, social and national development: Contemporary "Western" societies are regarded as most developed. Modernization is an evolutionary processes in which "backward" societies evolve into societies similar to Western societies. Hence, rural, agricultural, feudal, "primitive," societies will transform into urban industrialized, differentiated capitalist, "advanced," societies Advocates of this approach argue that modernization is an irreversible and progressive transformation in which societies overcome "traditional" barriers to economic growth, development, and democracy. Such theorists regard cultural values of individualism and the

"Protestant Ethic as the foundation for the development of the West. Modernization theorists are convinced of the universality of the Western experience and are optimistic of the validity and relevance of Western institutions for all nations. Modernization theorists follow traditional Western liberal views in economics and politics. They believe that free trade is mutually beneficial. Modernization theory should be understood in terms of the international context in which it originated: US hegemony; the rise of Stalinism; the Cold War; decolonization; and US-Soviet rivalry in the Third World. The policy implieation of this theory is the maintenance of US hegemony in global affairs, containment of "communism," and the legitimatization of existing North-South relation as mutually advantageous.

Dependency Theory Dependency theory originated from the pioneering

by Tanweer Akram studies of the Economic Commission of Latin America (ECLA), and the crisis of orthodox Marxism. A good number of Monthly Review writers advocated reformulating Marxist analysis in terms of the monopoly capitalism and the globalization of capital. According to the advocates of this theory, underdevelopment is not a natural phenomenon, rather a result of the subordination of the Third World through imperialism, colonialism, and neocolonialism. Dependency is incompatible with development: at best, there only be dependent development. The dependistas view the world in terms of "the center" and "the periphery." The underdeveloped world is characterized through the disarticulation of the economy and external domination. They argued that whereas in the advanced economies communication be-

tained that external dependence blocks development. According to them, the law of value oper ates throughout the world-system and transfers surplus from the periphery to the center. This prevents capital accumulation in the underdeveloped countries.

underdeveloped economies to

wards exports. They also main-

World-System Theory

World-System theory arose in order to surmount the deterministic view of the dependency theory. The protagonists of the world system theory argue that developing countries overcome their peripheral status. Mainly inspired by the works of Immanuel Wallerstien the world-system theory builds upon the theoretical heritage of neo-Marxism and the French Annales school. The advocates of this school argue that each social science discipline cannot have a separate logic, development must be understood in context to "long historical time

of analysis ought to be the world-system in its totality They are skeptical of the assumption that human history is invariably progressive. Furthermore, the bimodal description of the world does not suffice. Today, the world is a trimodal system: core, peripheries, and semi-peripheries. Semi-peripheries are those states that either have been able to capture a niche in the world market, developed by "invitation,", or have attained some degree of self-reliance. World-system theorists argue that while every state may not have a capitalist mode of production, all countries nevertheless participate in the world capitalist market. They believe that there are long-wave cycles of capitalist expansion and stagnation (the so-called a and B phases of Kondrafieff cycles). World-system theorists study both global dynamics and national forces for social change and development.

Tanweer Akram is the author of The Question of Imperialism and Other Essays.

# 'Farming First' brings Miracle in DPRK

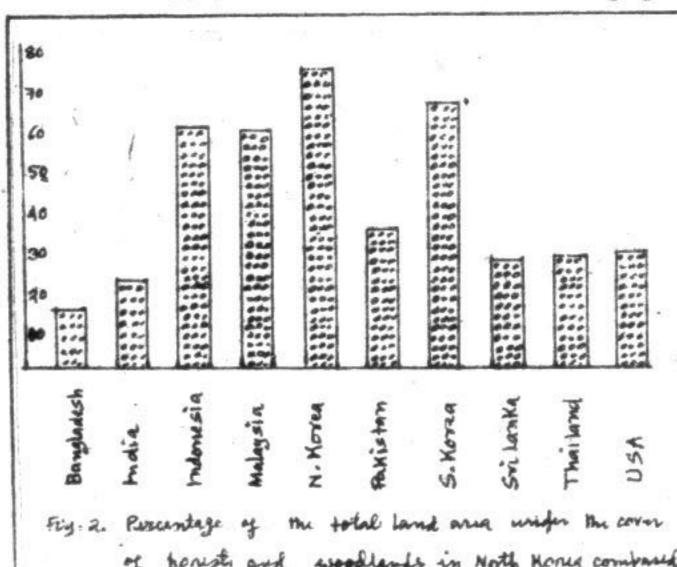
by Dr Kamal Uddin Ahmed

Agricultural development acfertilizers of different kinds to tivities in the field are given adbe applied to the soil for raising equate support by at least 14 research institutes covering various commodities and disciplines and working in conjunction with the Academy of Research in Agricultural Sciences.

## Seed Programme

the rate of one card for each. Crops-researches concentrated on obtaining earlymaturing high yielding varieties. having disease and wind resistance and capability to intake more nutrients and endure densely-populated situ-

formulating agriculture strategy the putting of even the demarcation ridges to crops and the covering of the highway-shoulders and side-slopes with crops (leaving no land to remain fallow) have added to the cultivable land area. Moreover, their Nampo project aims at reclamation of 300,000 ha of tidal lands and bringing them



ation. Germpl sinfrom different parts of the world were collected and tried. Seed-farms are owned by the Academy of Research in Agricultural Sciences and the Agricultural Commission.

## **Expansion of Crop Area**

While the adoption of cooperative farming itself led to the expansion of effective land area,

of borust, and woodlands in North Horus compand with some developing countries and U.S.A. in 1988.

under the plough.

### Diversification of Agriculture Instead of confining to one

cereal crop, North Korea has been growing as many as six of them, namely, rice, maize, millet, barley, wheat and sorghum. The land distribution for them in 1989 was as follows: rice-37 per cent, maize-19 per cent,

millet-19 per cent barley-11 per cent, wheat-9, per cent and sorghum-6 per cent. However, the total production of rice alone amounted to as much as 53 per cent of the total production of cereals of the country.

Environmentally, DPRK must be in a very good shape, there being as much as 74 per cent of the country remaining under the cover of forests and woodlands. Other Asian countries having high coverage include Japan (67 per cent), South Korea (66 per cent), Malaysia (59 per cent), and Indonesia (60 per cent). Those of medium coverage are the Philippines (36 per cent), Thailand (28 per cent), Shri Lanka (27 per cent), and Vietnam (28 per cent). In this matter, Bangladesh with only 14 per cent of its lands under forests is indeed very poor.

## Farmers' Education and Training

Like all other people, all farmers of DPRK have 11-year compulsory education. In other words, all farmers are highschool graduates, except some elderly people who went to workers' senior middle school (night school) and graduated there. Each province has an agricultural university and some agricultural colleges, as well as some specialized schools of agriculture including and inservice farm college for farmers.

Technology Transfer In North Korea, there is no extension department as such. As all farmers there are educated (not just literate) and most of them belong to cooperative farms linked up with the

country's state-run research institutions and agricultural commission, transfer of technology is not a problem. Once a year, lectures are organized at various places of the country, and both the employees of the agricultural, commission and farmers attend them. This forum is used for dissemination of new technology. Both the Great Leader and Dear Leader put forward their suggestions through these gatherings. Scientific information is also communicated through pamphlets, bulletins technical models and films.

## **Highest Rice-yield**

Quite understandably, North Korea is at present holding the distinguished position of being the top-most rice-yielding country of the world. From amongst 112 rice-producing. states, only 13 countries have the distinction of exceeding five tons of rice-yield per hectare. Countries with the yield of 5-6 tons are Spain, Italy, France, China, Uruguay, Peru and Cameroon. Countries with the yield of more than six but less than seven tons are USA (6.4), South Korea (6.7), Japan (6.2), Egypt (6.5) and Greece (6.5). Only one country has exceeded seven tons; and that country is North Korea (7.2). This performance is all the more remarkable for DPRK, a country having several so-called odds like (1) being an Asian nation, (2) having a 'developing' status, (3) following a centrally planned economy, (4) remaining in con-

stant conflict with its counter-

part South Korea and (5) not

being in the good books of USA, the mightiest nation on Earth.

tween sectors is coherent, in the

underdeveloped economies

there is only marginal exchange

among sectors. This distorts

### General Well-being North Korea is among very

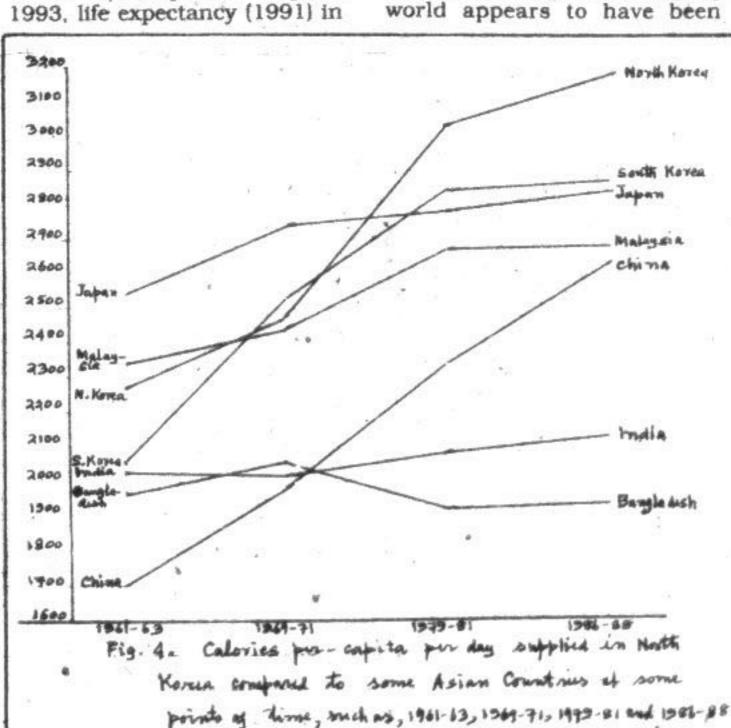
few developing countries where life expectancy at birth has exceeded 70 years. According to World Development Report, 1993, life expectancy (1991) in

population are also the highest This is the final instalment of a two-part article in which the writer explains the 'agricultural miracle of (135) after Japan (159). North' Korea and draws the attention of the policy-makers of Bangladesh to share the experiences in Hospital beds of USA (53) South Korea (30), Poland (66), Vietnam (33), Shri Lanka (28), China (26) are much lesser. In this matter, India (7), Pakistan (6), and Bangladesh (3) are very **Poverty Alleviation** 

The much talked-about problem of poverty alleviation that is haunting the developing

Bangladesh-2). North Korea's

hospital beds per ten thousand



North Korea and South Korea is 71 and 70 years respectively. The number of physicians per 10,000 population (1988-92) is very high in North Korea (27). compared to both developing and developed countries (USA-24, Japan-16, South Korea-7, China-10, India-4, Malaysia-4,

solved in DPRK. There is almost nobody there who can be treated as 'poor' in real terms. Back in 1979 Paul Raffaele wrote, "In North Korea, the average monthly income is low. but living costs are equally low. There is no taxation. Rent, including water and electricity, is

charged at a low two-to-five per cent of the worker's wage. Basic essentials like grain and cloth are rationed ... I did not see any · North Korean suffering from a lack of food."

The system there makes it difficult for a person to remain unattended, uneducated and unemployed. It is not easy to find a child who is hungry, does not go to school, does not wear school uniform, and when sick is not taken care of by a physician or nurse. The streeturchins are conspicuous by their absence.

"The children are virtually full-time boarders at the school they return to their homes each Saturday afternoon and report back to the school on Monday morning", wrote Paul Raffaele about a kindergarten school that he visited".

## Fruit of Agricultural Development

North Korea's leadership did not make the country run the wild race of industrialization and enhancement of total national income at the cost of agriculture and individual's income and well-being at the lowest level. It did not make mil lions to live in absolute poverty hunger, destitution and sickness so that thousands could live a princely life.

Every development activity in the country has been based on agricultural development. A good part of the industries is devoted to the production of such machinery or goods as are used for agriculture. The 'Farming First' attitude together with various other ideas of the president has not only made DPRK the topmost rice-yielding country of the world, but also a nation that is well-fed, wellhoused, well-dressed, well-educated and well-nursed.

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