

Dwelling in the Deluge

Photo Feature on Flood



Submerged city area (Gulshan).

— Star photo by Amran Hossain



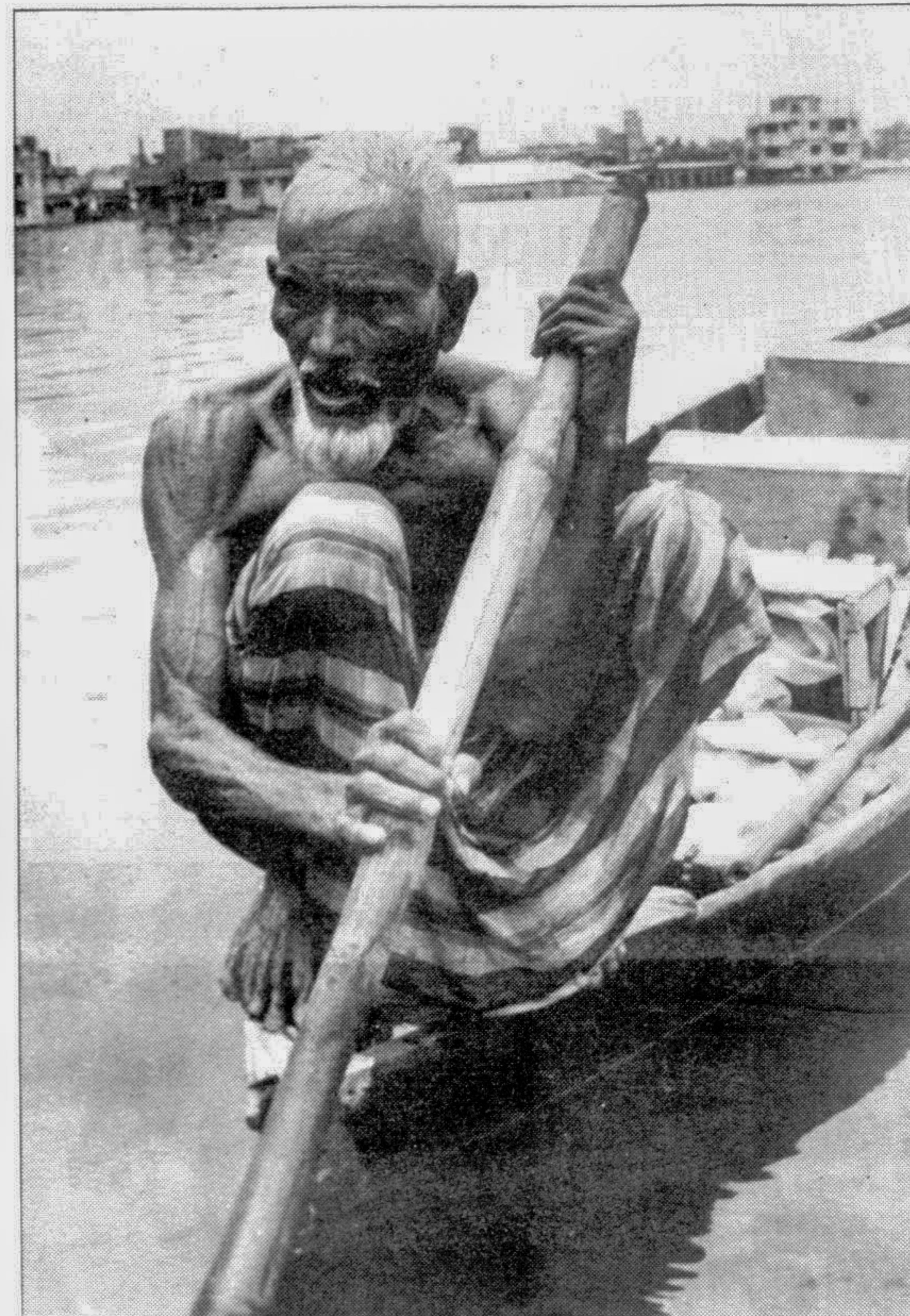
Passing most time on boat (Anandanagar).

— Star photo by AKM Mohsin



The affected queuing up for dole (Nayatola).

— Star photo by Amran Hossain



Abdul Hamid (60), a rickshawpuller finds boat a better option in flooded locality (Mugdapara).

— Star photo by Enamul Huq

DEVELOPMENT PROJECTS

Environmental Impacts Assessment

by Dr. N Shams Choudhury

PEOPLE of a community, a neighbourhood, or an indigenous society or citizens group, are often found skeptical about end results of projects implemented in the name of development. They claim that roads, bridges, terminals, factories, buildings, land development, etc in the process create waste products, and cause soil erosion, air and water pollution, crowding noise and other inconveniences in the form of disruption of people their trade and activities. In the name of development haphazard growth, cultural conflict, wastage and depletion of scarce natural resources, cropland and forestry, etc also occur, and mass exodus or extinction of people, animals and other species are also reported. This article helps readers view development with consciousness of who will be benefited and who will be hurt and the role of environmental impacts assessment to make development to the advantages of all.

Project Costs and Benefits

Three groups — facilitators, entrepreneurs and consumers/users, are distinctly associated with and have interests in the development projects. Facilitators provide infrastructure facilities to motivate entrepreneurs to invest and produce, promote productivity, minimize costs, produce services or

goods, eradicate poverty and illiteracy, maintain equity, and so on. The entrepreneurs invest for projects in various sectors like industry, transportation, health, education, etc. Consumers/users impose potential demands for the services or goods as solution or response to their problems or needs. Their demands vary with the performance, level of service, quality, reliability, security, cost, etc. of the output — goods or services. There are people in the society, beside the above three, who have interests in their present and future livelihood, well being and welfare and standard of living, pollution free environment, decent quality of life, preservation of green space, resources, endangered species, culture, tradition, history etc. This group represent society at large. Their interests are often adversely influenced by physical presence of the projects and/or poor performance, level of service, quality, reliability, security, etc. of the output — goods or services. Facilitators, entrepreneurs or consumers/users may also belong to the society at large depending upon their role.

Facilitators, or entrepreneurs have various options to influence the projects like design, evaluation, etc. Design options include location, scale and specifications, technology, operating, pricing, scheduling, etc. Incon-

veniences of the society at large relating to livelihood, welfare, etc. and impacts on the environment are disregarded or overlooked when selecting project options. This is because the selection process is often biased to satisfy economic or profit motives or interests of the facilitators and entrepreneurs as priority. The facilitators are more concerned with the project investment, operating, upgrading and maintenance costs; and the entrepreneurs are concerned with their net investments, costs of resources, revenues, etc and interested more in maximizing profits. Labour, capital and rent are the only basis of cost considerations in project evaluation. Neither costs of commodities such as land, water, air that are used for the disposal of harmful wastes or destroyed are covered; nor alleviation measures, compensation, resettlement or relocation or other environmental amenities or compatibility packages to offset damages or inconveniences to the society at large are considered. The costs of environmental damages and inconveniences are arbitrarily imposed upon the society.

To clarify the point supply

and demand curves of a project output — goods or services — are presented in the figures (a) and (b). Fig (a) presents supply curves with environment as a free commodity and with its costs. Fig (b) presents demand curves with no consideration of environmental damages and inconveniences, and with offsetting amenities for damages and inconveniences. S_1 represents supply of output when project options use environment as a free commodity i.e. all costs are not included. V_1 presents demand that fail to reflect societal needs for environmental amenities or compatibility. S_2 represents supply when full costs of offsetting amenities for environmental damages and inconveniences are covered, and V_2 reflects the total environmental amenities or compatibility. In both the cases, at equilibrium condition, the consumption or use pattern (O_1) remains the same as (V_1, S_1) because of non incorporation of all the costs, and failing to incorporate all societal and environmental need for amenities.

In the short term, output short of performance resulting to pollution, discomforts, con-

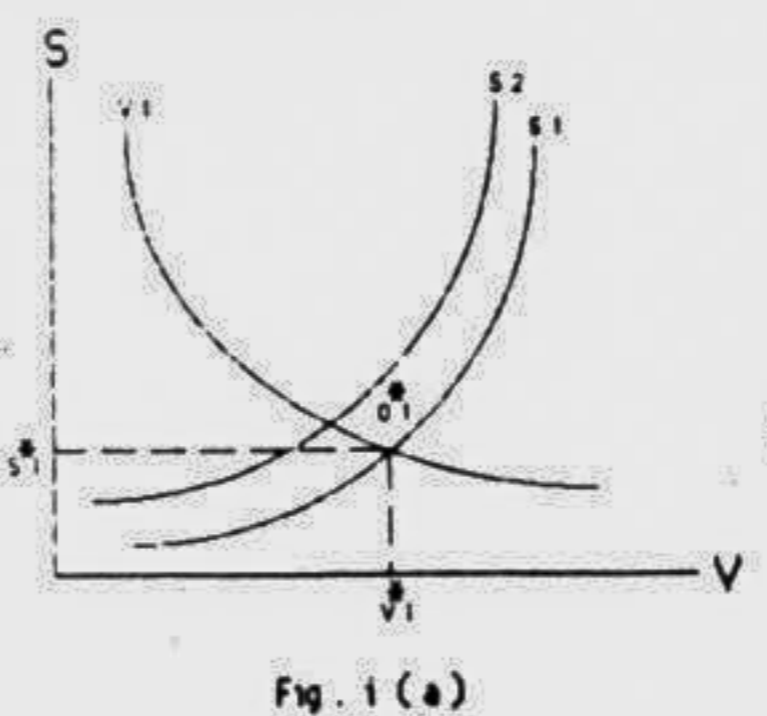


Fig. 1 (a)

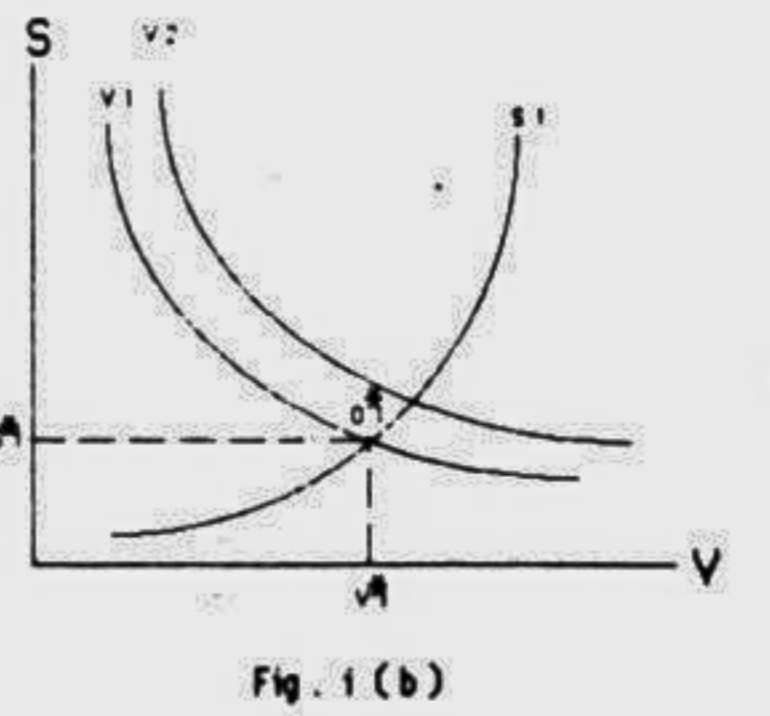


Fig. 1 (b)

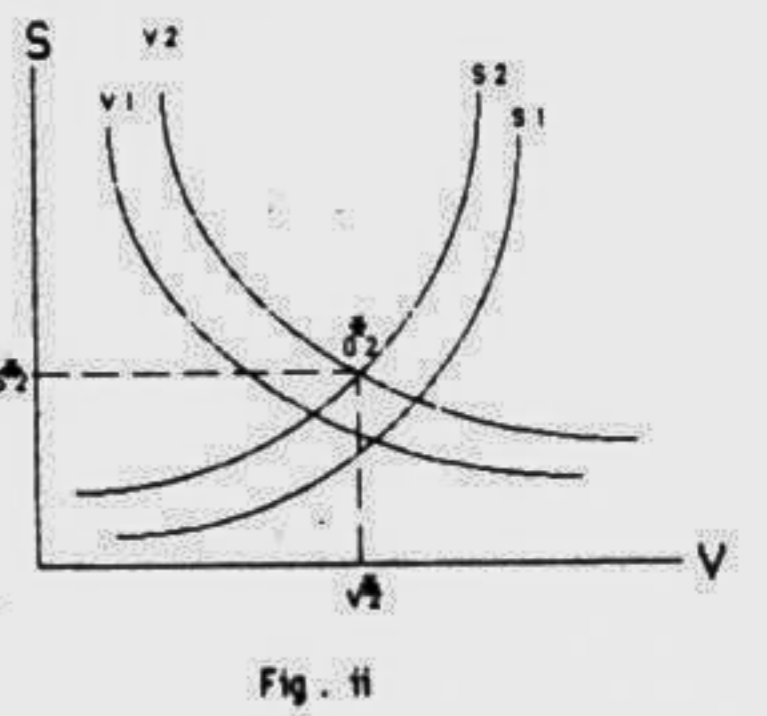


Fig. 1i

licts or disruptions of activities, etc. will result. In the long run, not only consumption/use pattern will be influenced adversely but continued societal inconveniences and environmental degradation will contribute to problems of larger scale.

Impacts Assessment

Environment is a common property. It is consumed and damaged with no regards to its costs and inconveniences to the majority because of economic interests and myopic view of those backing the projects. Development philosophy should not be that some will gain and majority will lose, rather some

will gain but majority should not lose, i.e. win-win approach. This requires assessment of environmental impacts due to a project. The central aspect of environmental impacts assessment is prediction of output consumption/use pattern based on optimum utility or satisfaction of consumers/users and the society at large in terms of performances within certain constraints. Once consumption/use pattern at equilibrium condition i.e. $O_2 = (S_2, V_2)$ of supply and demand is predicted as in fig. 1i, impacts can be assessed with set of impact models. The alternative/option providing highest

satisfaction or lowest dissatisfaction or some combination ensuring environmental congruence acceptable by all has more chances of being chosen for implementation.

helps to identify interests and concerns of masses, exhausts options to minimize, if cannot avoid all, the dysfunctional consequences; and select projects that optimize benefits to all with increased tolerance of the concerned society. Extent of review process, depending upon project complexities, scale and pattern, may range from passive approach of surveying and reporting to active approach of value analysis relating to environmental issues and continue through various planning phases.

Bangladesh Context

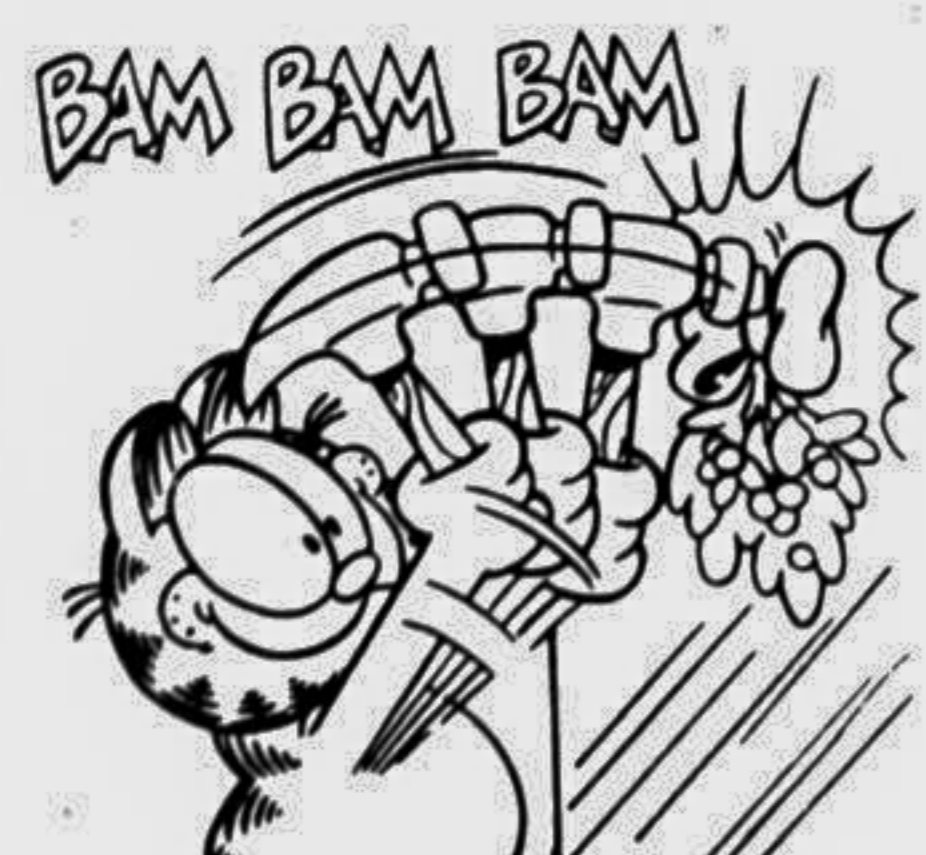
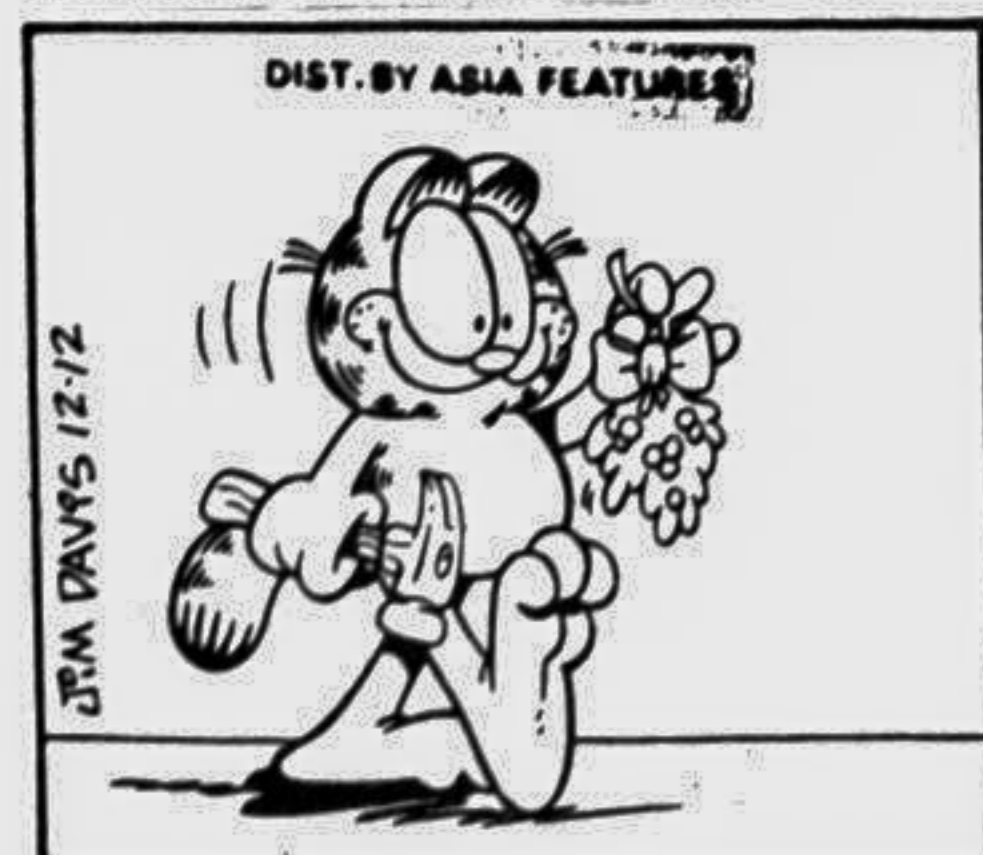
How are we doing in Bangladesh to cope with the environmental issues and the development? It appears that those with profit motives or backing economic interests are having free hand to waste and deplete resources, and destroy the environment. Bangladesh is one of the least developed countries and is striving for development. She is conspicuously handicapped with dearth of resources which she cannot afford to mismanage for solving one problem by shifting it to another sphere — there to create an infinitely bigger problem or let others jeopardize to satisfy profit motives or economic interests only. The policy of environmental impacts assessment as a pre-requisite for each project will definitely help to consider environmental costs

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by Jim Davis

