

Environmental soundness makes economic sense

"ENVIRONMENTAL degradation is not only caused by poverty -- it causes poverty. These words of caution were offered by Dr. Shekhar Singh, special consultant to the FAO, at a recent roundtable discussion sponsored by AGENDA, a DANIDA-funded project designed to support the development of environmentally sound business practice in Tanzania. Dr. Singh noted that Tanzania possesses vast natural resources which, if managed wisely, have enormous potential to contribute to the economic development of the country. He also noted that mismanagement of the resource base, on the other hand, is likely to exacerbate existing economic and social problems.

The topic of the roundtable, hosted by Business Care Services, the implementing organization for AGENDA, was "The Business Sector and the Environment." Representatives of government, business associations, and business consulting firms met to listen to a presentation by Dr. Singh and to discuss strategies for promoting informed decision-making and resource use on the part of the business community.

The main point made by Singh was that, in the past, policy makers have attempted to elicit "good" environmental behavior on the part of the business community by telling businesses what they "ought" to do. The rationale behind this approach has been that businesses cause the problems, businesses have the money, and therefore businesses should act in a socially responsible manner to protect the environment. Desirable as this approach might sound, in practice it has not proven effective in ensuring wise management of environmental resources. A more pragmatic approach, urged Dr. Singh, is to show members of the business community how environmental conservation can be aligned with its own financial self-interests.

The task at hand is to help the business community understand the short-term and long-term economic benefits to be derived from intelligent management of the environment. Businesses must learn to identify the environmental consequences of their actions and understand that it will be more costly in the long run if resources, and therefore options, are destroyed. As an example Singh offered the case of a forest on top of a clay deposit. In his opinion, businesses should be assisted to see that the forest may contain hundreds of plants and animals with as-yet-undiscovered commercial potential. Cutting the forest down to get to the clay might result in short-term gain for an individual business, but at incalculable long-term loss to the business community as a whole, both financially and in terms of the socially valuable results that might derive from newly-discovered resources, many of which are used for medicines.

Dr. Singh emphasized the opportunities Tanzania holds to benefit economically from its remarkable biodiversity. As explained by Singh, who has spent the last seven weeks working on a strategy for biodiversity conservation in Tanzania, Uganda, and Kenya, the concept of biodiversity is that one never knows what nature is going to need to respond to changes in the macro environment, such as climatic changes, emergence of new diseases, or depletion of the ozone layer. The more genetic diversity that is present, the greater the ability to adapt successfully, and the greater the margin of ecological security. Singh believes that much as gas and oil fueled the first wave of industrial development, "biodiversity is the raw material of the next industrial revolution". As the meeting point of five biological systems, Tanzania has great diversity of ecosystems and species. What is needed is biodiversity "prospecting", i.e., systematic cataloguing of species present.

A concern raised by some of the participants in the roundtable discussion was that, while the business community as a whole

may benefit in the long-run from conservation of environmental resources, the opportunity costs to individual entrepreneurs in the short-run may be high. Individual entrepreneurs make immediate decisions about what is in their own financial interest, with in relatively short time-frames that coincide with satisfying investors, repaying bank loans, and other financial commitments. To make it possible for them to adopt environmentally sound business practices, it is necessary to find immediate financial incentives. While this is challenging, it is far from impossible to do. A case in point is offered by an emerging solution to the problems of mercury contamination caused by the recent surge in small-scale gold mining. As pointed out by Mr. Flavian Goweile, representing the Tanzanian Chamber of Commerce, Industry, and Agriculture, Ludewa district alone saw an influx of over 15,000 prospectors in the last year. The environmental damage caused by unchecked release of mercury into the environment has been considerable. At the same time, according to some estimates, imports of mercury have cost the country almost half as much in foreign exchange as has been generated by sales of gold through legal channels. A recent invention by the Institute of Production Innovation (IPI) at the University of Dar es Salaam offers the opportunity to improve this bleak picture. IPI identifies technological solutions to common production problems and develops prototype machines and equipment for commercial-

ization in the Tanzanian market. One of the recent inventions they have been working on is an amalgam retort that recovers over 99.6 percent of the mercury used during gold processing. The device is a relatively simple one and should be available to small-scale miners for about TS 25,000. Savings to miners would be almost immediate: rather than using up 1 g of mercury for every 1 g of gold recovered, a small amount of mercury could be purchased and re-used until the economic activity elapses, eliminating the future cost of that input. At the same time, widespread use of the device would help solve a pressing environmental problem by reducing substantially the amount of mercury being released into Tanzanian air, water, and soil. IPI is presently working with The Business Centre to identify an investor interested in manufacturing and marketing the retort.

The gold mining case is but one example of how working with small-scale entrepreneurs can lead to economic and environmental benefits. As pointed out by Peter Frederiksen of DANIDA, it is important to differentiate between different members of the business community, i.e., between small, medium, and large-scale industry. Each has different interests and constraints, including in the area of environmental practice, and therefore different strategies must be devised for working with each group. Also, different groups have varying ability to "pay" for environmentally sound practices. If one is asking poor people to pay for environmental conservation, for example by changing their source of fuel or farming practices, it may be necessary for a third party (government or donor) to subsidize that change, in effect making an investment to provide sustainable alternatives.

Given the current emphasis in Tanzania on promoting small and medium enterprise, it is particularly important to understand how these businesses are likely to affect the environment. Prior studies on the relationship between small enterprise and environmental degradation in the developing world have concluded that small enterprises can be serious environmental polluters since they tend to be less technically efficient, less likely to adopt abatement technologies, and harder to monitor. Also, the noxious effects are more likely to lead to health problems given tight integration with residential areas. However, small firms can also do a lot to improve the environment. They are important generators of off-farm employment, which eases pressure on fragile lands. They also participate in activities with direct positive impacts on the environment, such as recycling waste products, tun-

ing-up motorized vehicles, and producing energy-efficient cook stoves.

Mr. Goweile of TCCIA indicated that the Chamber is eager to assist groups of small-scale entrepreneurs engage in profitable and environmentally sound activities, such as waste recycling to produce charcoal briquettes. However, he noted that, at present, there are no financial mechanisms for funding environmentally friendly projects, which typically yield small short-term returns but require large upfront investments. Dr. Singh noted that, in fact, environmental solutions do not always need to be fancy and expensive in order to be effective. He cited the example of a garbage collection scheme in Delhi that involved organizing small children and women to gather up and sort garbage, which was then collected and paid for on a daily basis. The scheme generated income, cleaned up the garbage-strewn streets, and put recycled waste to new uses.

The role of initiatives like AGENDA is to identify these kind of win/win options wherever possible -- to find solutions that are in everyone's self-interest, with quick and immediate paybacks. This will not always be possible. In the quest to protect the environment, not all entrepreneurs will win out all of the time, and as a last resort, there is a need for reasonable regulation and enforcement. However, as pointed out by Paul Bundick, Managing Director of The Business Centre, the Tanzanian government should avoid introducing excessive environmental regulations at the present time in order not to stifle the spark of entrepreneurship at this early stage in the transformation of the economy. Examples of useful activities that will benefit both business and the environment include:

- * Working on patent law and intellectual property rights, to protect the investments of local entrepreneurs who invent and produce technological innovations and identify commercial uses for specific natural materials.

- * Identifying outside partners who can supply the technical expertise to design and implement environmentally sound projects of benefit to the Tanzanian economy.

- * Working through associations, NGOs, and other business support organizations to educate the business community and policy makers about environmental problems and short- and long-term benefits of sound environmental management, relying on traditional forms of communication where necessary to get the message across. "If you try to give people a lecture" said Dr. Singh, "they won't listen. If the messages are incorporated into plays, dances, and other traditional forms of communication, people will listen and learn without even knowing."

By Jennifer Santer of Business Centre

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