CHAPTER 15

SECTORS: AGRICULTURE, FISHERIES AND FOOD

There is lots of it, but it is not much use. Much of the information that

Crop Agriculture Important sector

Crop agriculture is part of the productive sector, and of huge importance in the global scheme of things. Without food, there is no life. The revolution in agricultural productivity set the stage for the "north" to become wealthy a long time ago, and it is often overlooked that "north" agriculture remains amazingly productive. Under 5% of the "north" population is engaged in agriculture and there are embarrassingly large surpluses.

In contrast poor "south" countries might well have 80% of the population engaged in rural agriculture and associated support activities, and the country is hungry because there is not enough food. This is all about productivity, and a terrible failure of the relief and development community.

Irrigation

Iraq does not have much rainfall, and irrigated agriculture is one way to improve agricultural productivity. There are many lessons to be learned from history. The human and social dimension have to be taken into consideration as well as technical considerations like managing salinity.

Israel has demonstrated that irrigation can be used successfully to change the productivity of arid land. So also has South Africa and Namibia in Africa and California in the United States.

Rainfed agriculture

Rainfed agriculture is limited because of the very low and erratic precipitation in the area. Some drought tolerant crops are possible in some areas. The way in which the low and erratic precipitation problem has been solved in traditional agriculture has been in a very practical way. Periodic torrential rainfall in the watersheds of the various river systems produces flash floods that inundate large areas of very dry land. The water and nutrients associated with these flash floods create opportunities for crop agriculture, and very large areas can be seeded very quickly when these situations occur. If the crops mature, there can be large surpluses that then add to family and community level food security.

A variety of crops

Various fruits and vegetables can be grown in the area very successfully, but they do need an adequate supply of water. Very small plots have produced substantial amounts of tomatoes, onions, garlic, etc. but these plots compete for water with human and animal needs.

There are many tree crops that could be successful in the Iraq conditions. These include various citrus fruits as well as date palms.

Small farmers usually have some cattle that are the basis for dairy products, primarily milk. The exploitation of the market for milk has been growing and dairy is now an important part of the agro-

pastoral revenue. When there is serious drought the settled agro-pastoral community is more at risk than the pure pastoralist who has the opportunity to move to a better location.

There is an existing bee-keeping industry that provides the community with honey that is used in a lot of traditional area food.

Water

Water is the foundation of everything. The success of settled agriculture in the area depends more than anything else on water. There are many ways in which water can be provided to achieve success in the development of settled agriculture, but anything that is done must be acceptable to the community and be done on a way that serves the best interests of the community as the community sees it. Furthermore the development of water for one community group must not have a damaging impact on the way of life and economy of another group.

Tractors

Community groups can also make productive use of tractors. Some groups have found used tractors to buy at reasonable prices and have done so. Good used tractors would be a suitable subject for loan financing under the project development fund.

Training and extension

Training and extension is needed to add to the knowledge of the community about agricultural and development possibilities.

Livestock and Range Management Important part of agriculture

Livestock is an important part of agriculture in some parts of the country. Livestock are the source of revenue for the nomadic pastoral community and also represent family wealth, food security and economic security. The lifestyle of the nomadic pastoralist is very different from that in urban and even settled rural communities. Water is the most important factor in the success or failure of the pastoral livestock economy. The role of water in the economy is complex, and it is not just a simple matter of more water is better. The economy is quite productive in the sense that a very small amount of water generates a significant amount of economic value added, but it is a fragile economy and a very high risk economy. Animal health is very important to the pastoral community.

Rangeland management

There has been little impact on rangeland through management initiatives, though rangeland management could increase the productivity of the range and its carrying capacity.

Livestock markets

Livestock markets at the producer level are not as fair as they should be, with middlemen traders taking advantage of the producer to the maximum extent possible. This is an age old problem, and not easily solved by direct government or development intervention.

Livestock health and veterinary medicine

Livestock health is an important factor. Health services are needed, but they should be created subject to the discipline of market economics and expansion of the service capability funded by the beneficiaries.

Veterinary medicine has not been delivered effectively to the pastoral livestock community, though technically it has a lot to offer. To the extent that there has been veterinary extension and availability of

veterinary drugs, there has been an improvement in animal health, but the use of the capabilities of modern veterinary science has been very small to date.

Animal quality improvement

There are many ways in which animal quality can be improved, but the time frame is not fast. Culling poor animals from the herd is a starting point, and doing selective breeding starts the process of improved animal quality. The process of implementing and animal quality improvement strategy can go as fast as the community wants it to, but the results are not immediate. Eventually, it is to be expected that some communities will reach the stage where their animals are bred using artificial insemination (AI), and as this stage is reached it can be expected that other aspects of rangeland management, animal health and livestock marketing will all have progresses as well.

Fodder and feedlots

Food security for animals is a serious development issue that can be addressed through commercial fodder production and storage. The loss of value as animals go to market can also be addressed through commercial feedlot operation.

Marketing centers

Livestock marketing centers should be encouraged. These centers should be of value to the livestock owner wanting to sell and to the commercial community as a whole. These centers need to be able to handle not only the water needs of the animals, but also the fodder requirement. They should have access to market information to assist in the operation of a fair and efficient market. They will naturally evolve into more comprehensive commercial centers with hotels, restaurants, shops and a full range of commercial services. To the extent that they are created at existing commercial centers, there will be substantial economic growth.

Fisheries

Fisheries not particularly important

The fisheries sector has not been important in Iraq. There are some fishing operations in the Gulf, and there is some river fishery activity. Compared to the major fund flows from oil this is inconsequential, but in terms of communities that live in the riverine areas it is important.

Fish resources

Fish resources are becoming more and more problematic. There is overfishing almost everywhere and Iraq is likely to be in the same situation. Fish resources probably already constrain the fishery.

Resource management

Data concerning the fishing resources of the country should be collected and analyzed so that a sustainable management regime for the resources can be established. Almost every country in the world with fishing resources has exploited the resources beyond their sustainable yield and has experienced a decline in the value of the fishery product.

Fish marketing and cold storage

Fish needs to be fresh, or processed so as to be in a form acceptable to the market. A primary requirement is a lot of ice, and cold storage capacity. For a high volume fishery it may be desirable to have fish processing capability including filleting, etc. It should be noted that fish is one of the few products where the value is highest with the least amount of processing, with additional handling and processing reducing rather than adding value.

Fish transport needs to be fast and efficient. Fish is high value, but also loses its value rapidly if there are any delays. The roads along the coast are totally insufficient for a successful fishing industry, and most refrigerated trucks are not going to last long traveling over the rough roads that are the norm in the area at the present time.

Food

Food

Food is an essential, and should be easily available for everyone. The food sector is driven by markets ... with more or less intervention from government to encourage a sustainable supply of food. This translates into government subsidies and various incentives to produce more or produce less, and modalities that put food into the market at prices that are below cost.

One of the purest examples of market is to be found in remote rural areas where food is exchanged in the market and reflects supply and demand in its most basic form.

Food in Iraq

Food production in Iraq should be highly productive ... there are the conditions for food production.

Food supply should also be more than adequate because there is the financial capacity to import any food that is required.

Food security is an important, and there should be no difficulty with this on a national level.

An area focus for food security

Some areas of Iraq may have local food shortages, and the local markets may be be sufficient to handle shortages that last for a long time. On balance, Iraq should be a food surplus producing area and can be an exporter of food. In spite of this, from time to time there are local food shortages. The area needs to have adequate capacity for food storage at the area and the community level.

An area focus for livestock security

Some areas of the country may need a mechanism to provide price stabilization for livestock. The normal cycle for livestock in the agro-pastoral context is for herds to increase in size when times are good, and then decline in difficult times. Good times produce over-grazing and accelerate the arrival and seriousness of bad times. At the same time, livestock prices follow a pattern that weakens the economy, just when it will do the most damage. A livestock price stabilization mechanism would make an immense difference to the economic performance of the sector, for the benefit of all. The price stabilization mechanism requires not only the funds to make purchasing interventions in the market, but a way for the product to be processed in a way that allows for the food value to be conserved for future use.

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Infrastructure

Food security is enhanced if it is possible to move food stocks easily and at relatively low cost. Food security is also enhanced if it is possible to store food stocks with minimal loss in places where food stocks are needed, or likely to be needed. As part of the overall area proposals there will be significant improvement in the storage infrastructure. Food security is improved when there is an efficient transport system.