CHAPTER 16

Sectors: Industrial Sector

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

Energy

Energy: Oil and Gas

Great possibilities ... huge challenges
The energy sector has a capacity to be very profitable but the way the sector has been managed has given rise to something referred to as the “Energy Curse”.

The way in which this energy wealth is managed will determine the future of Iraq more than anything else. Whether Iraq will be able to do this depends a lot on the manner in which both the economic sectors and the governance sectors evolve.

It must be expected that everything to do with the oil and gas sector is going to be “hard ball” and that negotiators are going to have to work very hard to ensure that community interests are respected.

Within different communities are going to have an interest not only in the outcome of international agreements regarding oil and gas, but also what sort of arrangements are made internally so that oil and gas benefits are fairly allocated to different groups.

From an international perspective, the energy arena is not getting easier, but a lot more difficult. The oil and gas industry is not just big “western” companies, but also companies from Russia and China. In addition, companies from other countries like Venezuela, Mexico and India are going to change the energy sector landscape even more. Whether this will make the sector more beneficial to people at the “bottom of the pyramid” is not at all clear ... but there are interesting possibilities.

There is an opportunity for wealthy oil and gas enterprises to embrace the moral high ground and start doing a lot more for communities in places where they operate. Though politics is often controlled by the gun, people power can have an enormous impact. Guns did not get the British out of India, but people power with Mohatma Ghandi in the vanguard. Martin Luther King did not catalyze progress in racial relation with the gun, but by mobilizing people peacefully.
Energy: Electricity

Electricity generation
The electricity generating infrastructure is inadequate. Major upgrading is needed and there has been some work done on it since the end of the Saddam Hussein regime, but it is not at all clear how much work has been done and at what cost. This is essential management information that should be easily accessible to the public.

A major program to create adequate electric generating capacity should be a priority and done efficiently to the highest of standards.

Electric grid
The expansion of a nationwide electric grid is clearly desirable. This requires substantial capital funds, but the advantages are huge and long term.

The lack of electricity in poor places is a chronic problem. The technology exists to have adequate electricity supplies, and to distribute electricity to where it is needed. It takes investment, and it takes a reasonable approach to profit expectations. The key requirement is that electricity investment and electricity management and operations are done efficiently, ethically and without being dominated by greed and corruption from any quarter.

Rural distribution
The cost of rural distribution is high, but the value is substantial. Iraq should make an investment in rural distribution so that its remote communities have a chance to move forward without being constrained unduly by the lack of electricity.

Energy: Non-Petroleum Fuels

Overview
Iraq is in a good position. It has abundant fossil fuel resources, especially oil and gas, and also coal.

But, on the other end of the scale, there is a dramatic shortage of fuelwood and charcoal for household cooking in remote rural areas. These energy sources are contributing to an environmental crisis caused by the loss of trees and the production of carbon dioxide.

Fuelwood is in very short supply and increased production of wood for household use should be a priority. Trees need to be planted and existing trees cut in a way that does not destroy their capacity to grow again. The manufacturing of charcoal should be considered to be an anti-social act.

Coal ... natural gas
The possibility of using the coal deposits as an alternative to wood and charcoal should be explored. This may not be a viable option if the coal is not suitable for use in the household environment. Bottled natural gas would probably be a better intermediate step forward.

Windmills
The use of windmills to drive pumps and produce limited amounts of electricity may be an option.
Windmills have been an important source of energy in the past and modern windmills are well suited to use in pumping water in remote areas.

**Solar**

Solar technology has reached the stage where it is a viable option for driving remote electrical equipment.
Minerals and Mining

Summary overview

Mining and the exploitation of minerals in the “south” ought to be generating a lot of wealth for the “south”. It will do so when the agreements are fully understood by all parties, especially the signers for the “south” and there is a solid framework for value analysis.

It is not clear what role bribery and corruption plays in the sector, but it is probably significant. It is likely that substantial fund flows do not benefit the country but only benefit individuals. This is difficult to address, because the amounts involved are huge. Without addressing this, however, the wealth creation that is possible will never materialize.

The international mining companies are at an interesting stage, and they are likely to have some advantage when they are seen to be of benefit to the local communities where they operate. This is not an easy balance to achieve, because large scale mining causes a lot of change ... but it is possible, and could result in mining being pulled to communities rather than having to be pushed into the communities by the mining companies and a small elite.

There is every reason to expect that Iraq has mineral deposits that could be exploited on a more commercial basis. The knowledge about the mineral deposits in Iraq is not well substantiated. Much of the information is old and not supported by verifiable geological reports. There has been little exploitation of the mineral resources in Iraq.

Iraq has little capacity to do the work needed to provide a basis for a rational exploitation of the mineral wealth of the country.

The administration in Iraq should be supported so that better knowledge about the mineral resources in the area can be obtained. The knowledge gap should be closed as soon as possible with thorough geological analysis of the main mineral deposits.

Policy about mineral resource exploitation

The administration should be supported in work to establish a policy framework so that the exploitation of mineral resources is fair to all concerned and contributes to peace, security and economic development rather than having a destabilizing influence.

Training in mining skills

In order for the minerals and mining sector to succeed there needs to be basic skills training on a substantial scale. If there are exploitable minerals then there should be skills training to complement the other resources needs for successful industry development.
Manufacturing

The state of manufacturing

Iraq is not known for its modern manufacturing, with the exception of its production and export of crude oil.

There are parts of Iraq that have a history of handcraft ... but this is small scale and artisanal, of historic value but not of great economic value as a driver of modern Iraq.

Jobs ... employment

The manufacturing sector is usually an important area for job creation ... but in Iraq more of the jobs are in the services sector.

Many things need to be brought together in order for manufacturing to be successful: (1) availability of materials; (2) availability of productive low cost labor; (3) a reasonable enabling environment ... that is laws, regulations, culture, etc.; (4) working infrastructure including transport and energy; and, (5) markets and profit potential. Of these it is the markets and profit potential that are missing. Most of the market needs can be satisfied by products from other places at lower cost and more profit than from local manufacturing in Iraq.

My Experience in Madagascar

For some years I was a consultant to a manufacturing group in Madagascar. I have described this group as one of the best managed companies that I had ever seen, in large part because of their commitment to training their staff. Even though Madagascar had tremendous socio-economic problems, and was faced with terrible foreign exchange shortages, this company still put its staff training as a top priority.

As a result, the company was able to produce world standard quality and was able to participate in the global market on an equal basis with other world class producers.

The company invested in good production equipment, and the staff were able to use this equipment to make the very best quality product at very competitive costs.

But all of this took time.

What might be possible?

It is not easy to identify manufacturing that would be profitable in Iraq ... a lot depends on the willingness of an entrepreneur to take on a challenge and go into business in competition with the world.

There might be possibilities in the agro-production area using processing animal products ... processed meats and skins.

There might be possibilities in the petro-chemical area using the feedstocks that are available from the oil and gas sector. This could be very big business and profitable if done in cooperation with organizations that have access or control international markets.
Construction

Overview
Almost all the construction work in Iraq should be undertaken by local organizations and using local professionals. Performance may be enhanced in some cases with external technical input, but it should be limited and relevant to the issues at hand. Almost all of the infrastructure building that is needed can be done by local organizations with rather modest amounts of external technical assistance. The goal should be to construct infrastructure of an adequate quality at the lowest possible cost so that the economy can be more productive.

Rebuilding ... housing
The local construction industry should be funded to do the essential rebuilding needed as a result of war damage. All the essential utility services should be brought up to a level of service that should be normal in a country of Iraq's wealth.

Road construction
Road construction should be advanced where it is needed. Efforts should be made to ensure that the road network not only serves the main urban areas but also reaches remote communities. Not all the roads need to be built to international standards, but should be all weather roads.

Employment
The construction sector should be an important source of jobs in Iraq. Rebuilding should help increase paid employment in the economy of the area. The economy will be strengthened in lots and lots of little construction projects can be undertaken. Well planned development will not only provide jobs for laborers but to all levels of supervision, management and administration.

Training
In some areas training may be needed. Training should be available to the construction industry through a range of modalities. There should be skills training available through vocational training centers and “on the job” provided by cooperating contractors.