# Third Party Evaluator's Opinion on Daudkhel Fertilizer Plant Modernization Project (1)(2)

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# **Daudkhel Fertilizer Plant Modernization Project (1)**

#### Relevance

Like most of the developing countries the economic base of pakistan is dominated by agriculture and livelihood of majority of the people depends on the farm output. While the agriculture sector has been growing over time at a respectable growth rate, the proportion of people living below poverty line especially in rural areas has risen during 1990s. In its different policy documents government of pakistan has given priority to agriculture sector to improve the farm output and reduce poverty in the country. The policy was directed towards mechanization of agriculture sector along with the increase in fertilizer use to improve farm productivity. It was planned to enhance the domestic production capacity of fertilizer to provide regular supply at affordable rates to farmers as well as to save foreign exchange. It is in this context that the renewal and expansion of daudkhel fertilizer project is very relevant for pakistan's agriculture sector. The project is expected to resolve the gap in demand and supply of fertilizer and increasing its availability which is essential for increase in agricultural productivity and reducing poverty in the rural areas. The project will directly benefit the country by reducing its import bill and increasing farm output. The project is in line with the national development plan and priorities set by the government for the promotion of agriculture sector. The project will also benefit the country by reducing the pollution level in the project area and having no adverse impact on the soil quality. Thus renewal and expansion of daudkhel project is a step towards self sufficiency in fertilizer production and resolving the gap in supply and demand.

# **Impact**

The project was expected to increase availability of fertilizer, reduce pollution and improve agriculture productivity in the country. The increase in agriculture output is expected to raise income level of farmers and reduce poverty in rural areas. At macro level the project was expected to save foreign exchange which is in short supply in pakistan. The project has apparently good impact on the economy and income level of rural population. The production data of the project shows a steady increase in the output of fertilizer right from 1998-99 (the year of completion of the project) through 2001-02 (year of evaluation) from approximately 200,000 tons to approximately 470,000 tons. Although there is still room for improvement and production can increase to another 13, 0000 tons annually but due to host of factors this was not achieved till the time of evaluation. The main reason is the quality and quantity of natural gas which is the main input in the fertilizer production. Due to the government's policy of priority to domestic use of gas over industry in peak hours, the gas supply to the industrial facilities is interrupted frequently. The fertilizer production which depends on the gas supply is the hard hit due to the interruption of gas supply. The gas has to be in regular supply to achieve maximum production level.

The increase in fertilizer production has increased the fertilizer use in the country and the data shows that the fertilizer use in the country has increased from 1795 kg/ha in 1998-99 to 2117 kg/ha in 2001-02. The statistics further reveals that the better usage of fertilizer has increased the agricultural productivity of different crops raising income level of the rural farm households. The domestic demand of urea was almost equal to the domestic production with the production of this project in fy 2000-01 and in the subsequent year it exceeded demand. This was important improvement in the pursuit of self sufficiency and saving of foreign exchange. The calculation shows that pakistan saved about 37 million dollar annually because of the increase of domestic production mainly due to the renewal and expansion of daudkhel fertilizer project. The project contributed positively in raising the standard of living of the rural

population by enhancing agricultural output and their income level. The project has no negative impact on the environment and on soil quality which is another positive outcome of the project.

#### **Daudkhel Fertilizer Plant Modernization Project(2)**

#### **Effectiveness**

The agriculture is the mainstay of majority of the population in pakistan. Presently the agriculture sector contributes about 23 percent towards the overall gdp and provides jobs to 42 percent of the country's total labor force. Pakistan has plenty of irrigated land but supply of inputs like fertilizer, pesticides and good quality seeds remains lowers than the demand. Due to the importance of the agriculture sector, government of pakistan has given priority to this sector in the development plans and adopted a policy of easy availability of inputs to farmers for increasing farm productivity and raising their income level. The renewal and expansion of daudkhel fertilizer project is envisaged to increase the domestic production of fertilizer to resolve the demand and supply gap. The data shows that the project helped in enhancing the production of both urea and ammonia in the country. The project had achieved 95% of the planned production in fy 2001-02.in fy 2001-02 the production was at 90% of the planned level which is by all standard a remarkable achievement. If the quality and quantity problem of the natural gas is resolved the production can increase further. The company has also success in selling all its output which is important for the sustainability of the project. As far as quality of the fertilizer is concerned, the company has already acquired the iso 9001-2000 certification which is major achievement for a pakistani production facility. The fertilizer produced by the daudkhel project is of high quality as for as its ingredient contents are concerned. The quality of the daudkhel fertilizer project is comparable with any other high quality fertilizer (especially ffc) available in the country. The quality is also recognized by the users as well. The project is also good for the environment because it helped reduce population in the production and it has no adverse impact on the soil quality. The financial internal rate of return of the project is calculated as 4.62% and economic rate of return is calculated as 7.67%. Both are positive and higher than the market interest rates. This shows that the project is viable by this standard.

## Sustainability

The profit and loss statement of the daudkhel renewal and expansion project shows net loss from the day of its operation. The improvement in the situation was seen during fy2002 but the overall situation did not change. The plant is already operating at its more than 90% of its capacity therefore there is not much room for improvement through increase in production. The situation however can improve by lowering the recurring expenditure with some management efficiency and rightsizing the employment level. Government is divesting from the major state own enterprises but the daudkhel fertilizer company stands no chance for privatization due to the its loss making operation. If operation cost is brought down by some restructuring measures the expenditure can be controlled and then chances of its profit earnings will increase. In this way it will contribute positively to the national exchequer.