

Crop Valuation Calculation Method

ACER, together with representatives of the Provincial Directorate of Agriculture in Maputo, visited representatives from the Servicos Provinciais de Agricultura in Gaza and Inhambane Provinces as the Natural Gas Project has potential impacts across all three provinces, viz. Maputo, Gaza and Inhambane Provinces.

Annual crops

Most commonly, annual crops are valued by multiplying the yield (kg/hectare) by the prevailing retail market rate. However, it must be taken into account that the vast majority of areas affected are under subsistence cultivation (otherwise referred to as family sector), do not use paid labour and use a mixture of seed packages. Consequently, the real cost of production is difficult to calculate, especially as there are no data on production costs within the family sector.

Using income data from the National System of Aviso Previo do MADER and the cost of production as obtained from SIMA (National System of Prices) and averaging the values over the three provinces, compensation values were calculated.

In instances where data were not available for a specific province (not all provinces produced or have data on all the crops) use was made of data from that which were available. Also, where there were considerable variations in income, for example, crops such as rice and pineapples, it was decided to use only the yield and price data for the province with the maximum production, thereby avoiding potential problems with farmers receiving lower than normal values for the specific crop.

Tree crops

Due to the lack of yield data in all provinces and considering that most trees are more or less similar in age (over 20 years old), values based on age of the tree could not be applied. Evaluating the amounts paid as compensation for loss of tree crops by different projects, it was decided to adopt the 1999 values paid during resettlement associated with the establishment of the Beluluane Industrial Park.

Furthermore, for sugar cane and bananas it was decided to use the per leg (single plant) value. Also, for canhueira (Marula) it was agreed to pay for the trees in production. As previous projects did not value this tree in production a symbolic value was decided upon.

All unit values were originally done in Meticias, as detailed in the following table. Actual payments were rounded off to the nearest 10,000.00 Mts. Following a decision taken by the Joint Task Group in August 2001, unit tree crop values were increased by a factor of 60% (see table that follows). In October 2001, however, the Joint Task Group decided that a unit US dollar rate be assigned to each crop. These unit US dollar rates were rounded to the nearest US\$ 0.50. At the time of payment, using the prevailing exchange rate, US dollars were converted to Meticais and this figure again rounded to the nearest 10,000.00 Mts (in order to facilitate easier cash payments).

Crop	/unit	Maputo Province	Gaza Province	Inhambane Province	Recommended Value (Mts)
		Value (Mts)	Value (Mts)	Value (Mts)	
Cashew	/tree				849,000.00
Mango	/tree				2,240,000.00
Natal Mahogany	/tree				928,125.00
Orange	/tree				1,260,000.00
Lemon/lime	/tree				630,000.00
Eucalyptus	/tree				700,000.00
Avocado	/tree				800,000.00
Casuarina	/tree				100,000.00
Paw paw	/tree				10,000.00
Coconut	/tree				849,000.00
Canhueira/Marula	/tree				300,000.00
Maize	/hectare	1,500,000.00	1,500,000.00	3,000,000.00	2,000,000.00
Peanuts/amendoim	/hectare	7,650,000.00	7,050,000.00	6,600,000.00	7,125,000.00
Cow peas/fejao	/hectare	2,700,000.00	2,950,000.00	1,900,000.00	2,515,000.00
Cassava	/hectare	4,900,000.00	4,900,000.00	4,900,000.00	4,900,000.00
Rice	/hectare	3,150,000.00	6,000,000.00	1325,000.00	6,000,000.00
Sweet potato	/hectare	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Sorghum (Mapira)	/hectare	870,000.00	1,035,000.00	975,000.00	952,500.00
Sorghum (Mexoeira)	/hectare		930,000.00	870,000.00	900,000.00
Pineapple	/hectare	12,000,000.00	12,000,000.00	12,000,000.00	12,000,000.00
Pineapple	/plant				335.00*
Sugar cane	/leg	1,000.00	1,000.00	1,000.00	1,000.00
Banana	/leg	125,000.00	125,000.00	125,000.00	125,000.00
Basket of crops	/hectare	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00
Vegetables	/m ²	7,500.00	7,500.00	7,500.00	7,500.00
Garlic	/m ²	30,000.00	30,000.00	30,000.00	30,000.00

*Assuming 35,750 plants/hectare

It is important to note that for crops not listed, but found to be eligible for compensation, the relevant information is gathered and an informed decision is made with regard to a fair compensatable value. For example, where damage to a commercial tobacco field occurred, the affected company was requested to supply current yield and price information and using this a compensation value was determined.

For infrastructures such as irrigation pipes, kraals fencing, etc (referred to as agricultural infrastructure) current replacement values were assigned in addition to any labour costs, as necessary. In instances where livestock deaths occurred, current market prices for replacement were used.

Data sources:

- Crop yields.
 - Sistema Nacional de Aviso Previo (1999).
 - Crop Forecasting and Monitoring Unit, National Family.
 - Early Warning System for Food Security, FAO-GCPS/Mozambique.

- Prices.
 - Quente-Quente (May, 2001): Informação Semenal de Mercado Agrícolas no País, Região e Mundo, MADER-Direcção de Economia-DPTO. Estatística, Maputo.

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