

PROPOSAL SUBMITTED BY

PIN LDA, PROMOÇÃO DE INOVAÇÕES INVESTIMENTOS E NEGÓCIOS

PROJECT TITLE: MOTORIZING THE “ TXOVAS” (HAND CARRIERS)

1- VISÃO GERAL DO PROJETO:

(Resumo das informações gerais sobre o projeto)

“Motorizing the Txovas” is a project in the area of **technology** and aims at motorizing small tasks carried out by low income people both in urban and rural areas. Normally people in urban areas as well in rural settings conduct their businesses using Txovas, which are carriers normally with two wheels carrying a variety of goods that they transport for sale or for customers. They carry fruits around town, carry luggage outside of bus terminals, carry construction materials for customers, and are even used, in some rural areas, to carry people in bad health conditions to the hospitals, among others.



PIN has consulted a number of Txova Operators and they all supported the project of motorizing their Txovas. We approached at least 15 Txova Operators in the Maputo city and they confirmed that they would definitely enroll in such an initiative even if it meant motorizing their Txovas through small credit lines.

We calculate that the Maputo city alone has between 150 to 250 Txovas. If we include the suburbs then the number can raise to about 400 to 500 Txovas a number that keeps growing every week.

PIN Lta has consulted as well the Industrial Institute of Maputo and invited them to partner in this project. The Industrial Institute of Maputo, will lead the construction or adaptation of the small engines to be fixed in the Txovas. We have planned a prior study to determine the most feasible options for the engines namely, solar propelled, battery, electric or others.

We are submitting this project with the proposal of constructing solar engines as they are environmentally friendly and can be affordable to the operators, who are normally low income people. We will have to certify this by way of lab work.

Whatever the solutions, the engines may costs about 300 Usd on the highest side each to be constructed and adapted but this will also need to be confirmed by the lab work.

PIN will then offer these services to the Txova operators with payment facilities that would allow them not to be burdened much by the installation costs.

The total cost of the project including the lab work (100000000), the upgrading of the garage (mini factory) to produce the engines (100000000) and the construction/adaptation of the first set of engines (100000000), promotion/marketing (100000000) including 2% Indirect costs (100000000) is estimated at 400000000.

The project expects to recover the investment in 2,5 years.

2- OBJETIVOS:

(Resumo dos objetivos principais do projeto)

The project objective is to motorize the Txovas (a two wheel carriers) used by different people in urban and rural areas. The Txovas are means of transport used to carry goods. Those are services provided by people with low income to third parties. These people normally carry heavy loads of goods to the detriment of their health and still earn very little as they can barely do two to three trips per day. With small engines propelling their Txovas, these people will definitely be able to make more money while improving their health.

3- VISÃO:

(Visão a curto, médio e longo prazo do projeto)

At short term, the intention is to establish a small garage that can construct or adapt low energy engines to be fixed at Txovas or even other hand pushed carriers

The medium term vision is that the conductors see advantage in the initiative and start adhering to it in mass.

The long term vision is that the Txova conductors have an opportunity to make more money with less effort and improve their health and overall living conditions.