'An arid valley blossoming with cotton, transforming the economy of Kerio.'

The Kerio valley is a semi-arid area of the north Rift Valley. It is found over 1000 metres down into the Rift Valley below Eldoret and Kabarnet. This is hard, rocky land with an unforgiving climate, particularly in recent years. Not much agricultural produce thrives here but in the midst of this was a disused cotton ginnery from the 1980s with the potential to transform the landscape into fields of cotton.

The Rift Valley Products (RVP) company restored and took a long term lease on the Salawa ginnery and in 2009 and cotton production began its revival in the Kerio valley. The RVP has also promoted cotton production in Western Kenya and Pokot. The business model is to promote enough production locally to make the Ginnery commercially viable, while impacting on the local economy through smallholder capacity building in an old trade that is new to this generation. AECF has provided a match-funded grant of $1.3million to improve
ginnery infrastructure. Cotton is thought to offer the greatest potential for increased employment, poverty reduction, rural development and generation of increased incomes in arid and semi-arid areas of the country. Its employment and income generation potential is large due to its labor-intensive nature. The sub-sector has been identified as one that could help bring rapid economic development in the country. It has therefore been classified as a core industry by the Kenyan government, which has set up irrigation schemes in arid and semi-arid parts.

It is estimated that Kenya has 350,000 hectares suitable for rain-fed cotton production and potential to produce about 260,000 bales of lint annually. However, only about 40,000 hectares are under the crop and annual lint production stands at about 20,000 bales only from both production systems. Constraints in the sector include the legal and regulatory framework and market failure – in the form of collusion between cotton buyers that can adversely affect the farmer.

Both the farming and ginning sectors of the cotton-garment value chain show promise in Kenya. Better relations between farmer and ginner will improve cotton production in Kenya. It will avoid farmers having to sell cotton through middlemen who can exploit them. A regular purchasing cycle such as that employed by RVP, will assist farmers and lead to better production as well as higher supply.

**Purpose of the funds**

Cotton is relatively tolerant of dry conditions, though it thrives on more temperate climates such as western Kenya. The heat in the Kerio valley also threatens the crop by encouraging pests. But it is a crop that can survive here where others, e.g. maize, are unreliable, especially in the recent drought years. As such it has the potential to transform the local economy.

Cotton is in some ways a difficult crop, requiring regular treatment and use of pesticides and daily harvesting. RVP has therefore invested in a programme of support to smallholder farmers that includes provision of seeds, pesticides, and advice in addition to ploughing the land. RVP trains farmers and provides demonstration plots. It also provides a direct route to market for small-scale cotton producers. RVP has set up several buying and collection centres and uses 4 ton trucks transport the cotton to the Ginnery for ginning (the process of separating the seed from the fiber), compressing and baling into cotton lint. Finally the lint is set to spinning mills. Some of the seed is kept aside for treatment for replanting, the balance is sent for processing (RVP has an oil mill in Nakuru for this).
Farmers also receive inputs from the RVP Ltd to catalyse production. The cost of these inputs and of ploughing are deducted piecemeal from the farmer’s cotton income. Farmers receive just above the government price for cotton from RVP – currently Ksh34/kg. The cost of production on a small farm of around 1 acre is around Ksh 26/kg so the margin for the farmer, though modest, is a great improvement on the subsistence livelihood before cotton production began.

Lessons Learnt

In some areas (typically Western Kenya, where there is a higher opportunity cost of growing cotton instead of other rain-fed crops) many RVP contracted farmers are finding it difficult to fulfil their obligations to RVP in terms of refunding inputs via cotton production. However in the Kerio valley, where the operation is more closely managed, 30% of farmers have paid back their debts in full, a further 40% are on track.

Farmers are paid cash on collection. This provides a good incentive to continue with cotton farming and makes it an attractive alternative to other rain-fed crops.

<table>
<thead>
<tr>
<th>Metrics box</th>
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<tbody>
<tr>
<td>AECF repayable grant</td>
<td>US$1,334,120</td>
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<tr>
<td>Matching funds</td>
<td>US$1,334,120</td>
</tr>
<tr>
<td>Amount spent</td>
<td>450 tonnes of cotton in 2010 (up from 50 tonnes in 2009), amounting to an influx of $200,000 into the region in 1 year.</td>
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<tr>
<td>Produce</td>
<td>Number of small holder farmers benefiting</td>
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<tr>
<td>Produce</td>
<td>2000 farmers in the Kerio Valley, 4000 cotton farmers in Western Kenya and 300 farmers in Pokot</td>
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AECF Contribution

- Contribution to the construction or rental of cotton buying and collection centres.
- Contracting of ploughing services to prepare and ready the land for planting. Part of the cost is offset against the farmers’ income from the cotton.
- Procurement of basic implements such as hoes and machetes.
- Full time operations manager, three senior extension workers and 24 field agronomists and extension workers
- Project vehicles – including lorries, tractors and motor bikes for extension supervisors.
- Contracting of pesticides, spraying services, and knapsack sprayers.
Employee and smallholder farmer, RUTH MUTHAI,

Ruth is a worker at the Ginnery. She performs some of the manual tasks of shifting the sifted cotton between rolling machines and into the baling process where the bales of lint are produced. Like many of her colleagues at the ginnery, she is also a smallholder farmer in the area.

A 35 year old widow with 4 school-aged children, Ruth was struggling to meet the financial requirements of the school fees and the other needs of the household. Since she now has a regular weekly income through RVP, she is comfortably able to meet her financial needs, and has also been able to extend her own farm to useful production – cotton, maize, beans - whereas previously she had to lease the land in order to secure school fees.

Ruth employs someone full time to manage her 5-acre farm and has a casual labourer who helps with her 1-acre cotton harvest.

She commented that work at the ginnery is highly sought after and that employees are very happy there and their turnover is almost nil.
Employees and smallholder farmer, PHILIIP KIPSAN

Phillip is a young smallholder farmer in the Kerio valley. Previously he farmed maize, which had unreliable yields and paid only around Ksh 15/kg. Cotton farming gives him Ksh 34/kg and he is now on his second harvest. He is very happy to have a cotton field now and has been able to buy a sheep and a goat with the proceeds.

The process of harvesting the cotton is labour intensive but not difficult. Phillip says he gets support from RVP extension workers on how often to spray pesticide, and on when to harvest the crop, to ensure it is graded ‘A’ and not ‘B’. Grade ‘A’ guarantees a good price (include difference in price).

The cotton crop can suffer disease and agrochemicals constitute a cost to the farmer. Philip also has to be on guard to prevent animals from damaging his crop.
Sectors funded by AECF
AECF aims to encourage private sector companies to compete for investment support for their new and innovative business ideas in agri-business, rural financial services, renewable energy and technologies to assist small farmers to adapt to climate change.

Criteria for funding
To qualify for funding a project should be commercially viable and have a positive impact on the rural poor in Africa, delivering increased incomes and employment for poor people, through reduced costs and improved productivity.

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