



## Applying SROI

### Labour Intensive Rural Infrastructure Programme Rwanda, 2010

In 2010 the HIMO (Haute Intensité de Main d'Oeuvre) project was evaluated, for the Netherlands Embassy in Rwanda. As it was requested to provide answers on the impact of the programme the SROI methodology was applied, in combination with other methods like PIA. Using SROI, the impact of a number of selected projects could be quantified and monetised.

#### 1. The project

Since October 2007, the Netherlands has been supporting the second phase of HIMO projects (total budget Euro 20.5 million) in four provinces of Rwanda. The NGOs Helpage Rwanda and German Agro Action are implementing the projects. Interventions were in the fields of rural infrastructure such as roads and bridges, marshland development, tree plantations and erosion control. Also a number of fishing communities were supported with infrastructure and capacity building.



#### 2. SROI - process

Three (national and international) consultants carried out the SROI analysis.

SROI was used for the evaluation of all components of the project; in this case study the results of two are described.

##### Roads

For the impact of road infrastructure, two roads were identified and a team of three experts spent two days on each road to collect information. Together with local leaders a stakeholder map was created and the most important stakeholders identified. Then, interviews were held at different points along the road to understand the variation of impact in addition to the overall impact.

To complement this information with data on land use and cropping patterns over several years, a visit was paid to local administration. However, this information was not available. Therefore the SROI calculation had to be based on partial information and could not be as exact as desired.

##### Fisheries

In the case of the fisheries component of the programme sufficient data could be collected to execute an SROI calculation.

For this SROI meetings were held for a full day with some 50 stakeholders. First a general meeting was held in which different stakeholder groups were identified, and the main changes were identified and ranked. Consequently, smaller groups were created that each addressed one of the changes to arrive at a quantification and monetisation.

### 3. Summary results of SROI

#### Roads

The results show that the improved rural roads bring economic development to the area. Depending on how far away from a market place a village is situated, villagers mentioned the following impacts:

- easier to bring food to market (time savings and lower transport costs);
- saved time is spent to increase agricultural production;
- importing food and other supplies has become easier, resulting in lower prices and higher volumes.

Other effects from constructed roads that were mentioned:

- increased accessibility of health facilities: to get to the nearby health centre and ambulances are able to enter the area;
- resulting in addressing illnesses at an earlier point, thereby reducing the number of sick (non-productive) days;
- education and medical personnel are easier available.

#### Fisheries

The investments in the fisheries cooperation (organisation building, construction of jetties, providing boats etc) have initially resulted in larger and better catches and considerable profit for the fishermen and the traders (who are often in the same family as the fisherman). Moreover, the improved road provided market access, making local traders (among whom many women) no longer dependent on outside traders coming to the lake shores, thus keeping the profit within the village. Also there were positive social changes as a consequence: less conflicts between locals, more children going to school, higher status for women.

There were also some negative effects. The increase in catch has resulted in over-exploitation of the lakes and measures had to be taken to restock the lakes. Another impact was for those who had cropland close to the lakeshores: because of erosion protection methods, they had to give up their land and became fully dependent on fishing.

### 4. SROI calculations

#### Roads

The increase in volume of trade could not be calculated since data on the quantities of produce were not available. However, interviews provide information on the prices of crops before and after the road construction, see below. Given the data on time savings and extra production, an economic benefit is assumed.

But to make an exact calculation of the change, more information is needed on the quantities of produce before and after the intervention. Comparing this result (and all other quantified impacts) with the initial investment shows the 'profit' of the created roads.

Change in prices of local agricultural produce because of the rehabilitated road in Kitabura Village					
Product	Price (in RWF)		Unit	Quantities	
	Before	After		Before	After
Tomatoes	3	4	Basin		
Beans	200	320	Kg	2 tons/wk	5 tons/wk*)
Sorghum	200	280	Kg	3 tons/wk	8 tons/wk*)
Sweet potato	1,5	3,5	Basket		
Banana	1	2,25	Hand		
Courgette	75	150	Each		
Cabbage	50	100	Each		
Spinach	10	50	Fistful		

\*) during the harvest period of three months

## Fisheries

In this case example the focus is on the direct economic change that fishermen (and their families) experienced. At this point it was noted that negative as well as positive change occurred.

Because of the loss of cropland alongside the lake, the decrease in agricultural yield was estimated at RWF 45,000 per year per household. Change in annual revenues from fishing was estimated at RWF 356,250 per household. Therefore, the improvement in annual income per fisherman was agreed to be RWF 310,750. For traders the increase in revenue was set at RWF 393,000. In this example, we expect this change (benefit) to last for at least three years. After that, new conditions and needed investments cannot be foreseen.

Total investment for the improvement of fishing industry in the region was RWF 138,110,000. Development partners and the government made this investment. Of course, fishermen and traders invest too, in time. However, since they would have worked anyway, this time investment has not been taken into account.

Below, a quick overview of the calculations. Note that in this overview other impacts like increased health are not taken into account. Therefore, the SROI-ratio does not reflect the total impact of the whole project.

Stakeholder	Input per stakeholder	Impact	indicator for impact	Quantification	X	no. of persons benefiting	gains for the stakeholder / group	no. of years benefiting	total value per stakeholder group	attribution to HIMO	=	Total added value
HA Rwanda (donors)	128.110.000	achievement of mission										
Ministry of Agriculture	10.000.000											
Fishermen	time (non-quant)	Increased income	idem	310.000	x	115	35.650.000	3	106.950.000	0,7	=	74.865.000
Traders	time (non-quant)	Increased income	idem	393.000	x	280	110.040.000	3	330.120.000	0,7	=	231.084.000
<b>Total input</b>	<b>138.110.000</b>								<b>Total benefits per year</b>			<b>305.949.000</b>
									<b>SROI Rate:</b>	<b>2,22</b>		

## 5. Conclusions

The general idea that rural infrastructure is important for the local economy was confirmed. The investments of rural infrastructure resulted in an increase in income in the rural areas. This knowledge could lead to a different programme set-up. If these economic gains are estimated (in close consultations with the stakeholders) before the start of a project, motivation and thus solid arrangements for maintenance could well be achieved, ensuring the sustainability of the programme.

The SROI results show that during the initial period both fishermen and traders improved their income dramatically. Since their impact has now been calculated, they can and should be convinced to (partly) finance the restocking of the lake and the maintenance of the access road in one way or the other.

The examples above show that the SROI methodology can yield important and pertinent results even if not all data are available for the complete analysis. The open communication – pivotal during the analysis – leads to new insights for project planners, implementers and the target group as well.