ValueLinks Module 11
Managing data and monitoring

ValueLinks 2.0

Setting boundaries  Chain analysis and strategy  VC upgrading solutions  Monitoring

1. Scope of value chain development
2. Value chain analysis
3. Value chain strategies
4. Programs and projects

5. Business models
6. Business linkages
7. Services
8. VC Financing
9. Quality and standards
10. Policy instruments
11. Managing data & monitoring

Solutions for improving the value chain
Monitoring the impact of value chain projects

Contents

1. Data collection and management
2. Monitoring value chain development impact
3. Managing for development results

Principles of data collection

- Need to quantify the value chain putting numbers into value chain maps.
- Economic, environmental and social analyses of value chains underpin strategic considerations with quantitative data and provide a basis for project monitoring.
- Collecting the right data and assuring reliability and consistency are key issues for project analysis and follow up on progress and impact.
- The challenge is to concentrate on the data actually needed.
- Economize the effort by using the same information for several clients and different purposes (from planning to statistics).
Data: Determining the numbers

1. Primary production – statistical data S / parameters P / composed data C

<table>
<thead>
<tr>
<th>Description</th>
<th>Metric</th>
<th>Data years</th>
<th>Source of information</th>
<th>Assessment of reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole value chain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volume of end product (S, C)</td>
<td>t</td>
<td></td>
<td>National statistics</td>
<td></td>
</tr>
<tr>
<td>Retail price / end product (P)</td>
<td>$ / t</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value generated (C)</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Farmers, type 1 (S) number</td>
<td>number</td>
<td></td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>2. Farmers, type 2 (S) number</td>
<td>number</td>
<td></td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Average Farm size (P)</td>
<td>ha</td>
<td></td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Cultivated area / farm (P)</td>
<td>ha</td>
<td></td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Yield of raw product (P)</td>
<td>t / ha</td>
<td></td>
<td>e.g. FAOSTAT</td>
<td>High – medium</td>
</tr>
<tr>
<td>Loss at farm (storage) (P)</td>
<td>%</td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Farm gate price / raw product</td>
<td>$ / t</td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Farm production</td>
<td>t / year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Produce actually sold</td>
<td>%</td>
<td></td>
<td>Low - medium</td>
<td></td>
</tr>
</tbody>
</table>
### Monitoring the impact of value chain projects

#### Contents

1. Data collection and management
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3. Managing for development results
OECD-DAC criteria used in project evaluations

Relevance
- To what degree do the programme’s objectives remain valid?
- Are the programme’s activities and outputs consistent with its key goals and attainment of objectives?
- Are the programme’s activities and outputs consistent with its intended impacts and effects?

Effectiveness
- To what degree were the programme’s objectives achieved, or are anticipated to be achieved?
- What chief factors were responsible for the achievement or failure of the objectives?

Efficiency
- How cost-efficient were programme activities?
- Were objectives achieved on time?
- How efficient was the programme implementation compared to alternatives?

Impact
- What occurred as a direct result of the programme/project?
- What real difference was made to the beneficiaries as a result of the activity?
- How many people were affected?

Sustainability
- To what degree did the programme’s benefits persist following the end of donor funding?
- What were the major factors
- What chief factors were responsible for the achievement or failure of the programme’s overall sustainability?

Elements of a results monitoring system

The results monitoring system of GIZ includes six steps:
1. Examine/adjust the results model
2. Clarify the requirements to be met by the Results-Based Monitoring (RBM) system
3. Make results measurable
4. Devise monitoring plan and monitoring tool
5. Collect and analyse data
6. Use RBM findings
Common impact terms

(Aggregate Impact)

Impact

Outcome

(Use of Output)

Output (of the project)

Impact pathway

Impact pathway and value chain

Poverty Impact

Growth Impact

Outcome

Chain Upgrading

Use of Output
(e.g. by service providers)

Output of Project

(Aggregate Impact)

Impact

Outcome

(Use of Output)

Output (of the project)

Income

Raw Material Supply

Production

Transformation

Trade

Input providers

Primary producers

Industry

Final Sales Points

Support agency

Business association
Four impact hypotheses

- Poverty Impact
- Growth Impact
- Outcome Impact on value chain
- Use of Output (incl. those of service providers)

1. The interventions and services of the project are accepted by the chain actors
2. Partners and clients invest to realise the agreed chain upgrading strategy, individually and as a business community
3. Chain upgrading leads to a greater competitiveness, additional value-added and higher chain income
4. The poor receive part of the additional income generated and thus pass beyond the poverty threshold (1 US$ per day and person)

Monitoring chain upgrading

**Criteria for observing structural change**
- New outlets for the products exist (e.g. export).
- A new or different technology is in use.
- New or improved products are sold to final costumers.
- Product standard has been agreed upon and is being implemented.
- A new producer association or BMO has been founded.

**Criteria for observing gradual change**
- Change in productivity parameters or cost of production in typical enterprises
- Number of producers / enterprises using critical inputs and services
- Percentage of produce sold in different channels of the value chain

**Criteria for attributing the change to chain promotion projects**
- The upgrading is in line with a strategy that has been agreed upon in the framework of the project.
- The improvements have been realized by firms and associations who either cooperate with the project directly, or receive support services from partners.
Prototype impact model

Aggregate Impact
- Pro-poor growth
  - Higher income, more jobs, better distribution along the VC (share of the value-added remains with poverty groups)

Growth impact

Outcome
- Improved competitiveness of the value chain (growing value / new, better products / higher productivity / new markets)

Outcome
- Coordinated investment / upgrading of producers, Industry, traders and supporters

Outcome / Use of Output
- Mutually advantageous business linkages
- Better know-how, technology, capital etc. (using services)
- market institutions and standards are in line with business needs
- Actors organize themselves to find business partners
- Service demand articulated, Service supply is appropriate and affordable
- Government and Sector organizations agree on rules and standards.

Use of Output
- Promotion of producer associations, business matchmaking
- Promotion of demand and supply of VC services
- Influence Government on issues of economic policy and regulation

New GIZ results model

Objective

Result
- Result

Result
- Result

Result
- Result

Result
- Result

Result
- Result

Result
- Result

Result
- Result

Result
- Result

Result
- Result

Result
- Result

Result
Impact chains and the attribution gap

Formulating indicators

Expected impact:
Small farm households improve their income from the sales of a commercial product.

Indicator A
Greater sales contribute to a higher income of farm households.

Indicator B
In the year 20XX, a number X of families sell at least a total volume of X, with prices increasing by at least X%.
Monitoring the impact of value chain projects

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Principles of managing for development results

- Focusing the dialogue on results at all phases of the development process
- Aligning programming, monitoring and evaluation with results
- Keeping measurement and reporting simple
- Managing for, not by, results
- Using results information for learning and decision making

M&E feeds into:

- Short-term operational management
- Strategic management, and
- Reporting
Data collection and timeline

Data collection
- The formulation of indicators should take the initial VC analysis as a baseline.
- Either the secondary data available in partner systems are used as sources of verification, or primary data are collected using qualitative or quantitative collection methods.
- Cooperation with other donors in the same VC.
- Each indicator must state the source of information or method by which the data are collected.

Timeline
- If no baseline data are available at the start of the project, they must be collected within the first year of implementation.
- GIZ project progress review missions usually take place 9 months before the end of the project.

Summary: Main lessons to remember
- VC development needs quantitative data throughout the strategy and implementation processes. Data-intensive tasks include VC analysis and strategy formation, and the quantitative analysis of business models and financing (ValueLinks modules 5 and 8). VC analysis, strategy formation and monitoring require the same types of data.
- Analysts have to accept the fact that many data are rough estimates that can only be determined within a range. The task and the challenge is to produce a consistent set of data based on the best available information. This is achieved by collecting and triangulating data systematically, gradually improving data quality.
- Monitoring builds on the strategic considerations for VCD and the data sets generated during the planning and implementation process. The decisive point is to “reconstruct” the impact hypotheses of the VCD strategy and verify to what extent they have worked.
- The results of VC analyses, strategic considerations and monitoring not only need to be useful; they have to be utilized in all stages of the VCD processes. The data collection effort should correspond to the information actually needed to conduct VC development.