Zimbabwe: Irrigation Programme Communal Areas III

Ex post evaluation report (final evaluation)

OECD sector	31140	
BMZ project ID	1994 65 141 (investment) 1994 70 055 (back-up measure)	
Project executing agency	Ministry of Agriculture, Mechanisation and Irrigation Development; Department of Water Development (DWD)	
Consultant	CES (until 2001); GFA (2001-02)	
Year of ex post evaluation report	**2010 (sample 2009)**	
	Project appraisal (planned)	**Ex post evaluation (actual)**
Start of implementation	Q IV 1993	Q IV 1993
Period of implementation	13 months	101 months
Investment costs	EUR 3.58 million	EUR 5.29 million
Counterpart contribution	EUR 1.13 million	EUR 0.96 million
Financing, of which Financial Cooperation (FC) funds	EUR 2.45 million	EUR 4.33 million
Other institutions involved	./.	./.
Performance rating	4	
• Relevance	3	
• Effectiveness	4	
• Efficiency	4	
• Overarching developmental impact	3	
• Sustainability	4	

Brief description, overall objective and project objective with indicators

The project is the third of a total of four phases that have been promoted since 1983 with Financial Cooperation funds to develop irrigated farming for small farmers in the communal areas. The overall objective was to help stabilise and increase the incomes generated from agriculture by small farmers and their families that are part of the Negomo irrigation system (Kanhukamwe) in Mazowe District, Mashonaland Central. An annual family income of an equivalent of at least USD 700 was to be generated from irrigated agriculture three years after the start of operations (in 1992 prices). The project objective was to increase agricultural production on a total surface of 356 hectares (297 farms with 1.2 hectares land each), whereby achievement was to be measured against a cropping intensity of at least 160 % and yields per area of at least 85 % of the respective targets, three years after operations started up. For the first time in Zimbabwe, the irrigated area was to be operated by users with external professional management to be contracted in the private sector. In conceptual terms, this focus on private-public partnershapt was to mark a departure from previous phases. Investment measures primarily included the construction of a water storage facility, water piping

and a pumping station, a distribution system, field irrigation gear (sprinkler systems) and additional infrastructure and equipment required for operation. It was largely financed using remaining funds left from the previous phases (EUR 3.4 million).

The project executing agency received support with the planning and design of monitoring and operational organisation measures and with activities to prepare and train farmers within the framework of a back-up measure. In addition, central operations were funded using FC funds during the first few years as part of the back-up measure. The five-year backstopping phase launched in May 2001 and the fourth phase of the programme were suspended after one year, as a result of the serious deterioration in the prevailing political and economic situation in the country.

Design of the development intervention / major deviations from the original project planning and their main reasons

The area of land originally to be irrigated was increased by about 26 % to 356 hectares, and the reservoir capacity increased by some 30 % to 150 m^3. The newly built dam broke in August 1997, as a result of which an independent consultant was called in to examine the liability issue. The report of the consultant concluded that there had been no shortcomings in planning or construction, and that the hydro-geological problems responsible for the dam break were unforeseeable. Repair work then had to be paid for using project funds.

Back at project appraisal, the main risk was pinpointed as the actual genuine will and readiness of the Zimbabwean Government to embrace a public-private-partnership approach. In such a framework, the commercial operator was supposed to provide the technical expertise for proper operation of the irrigation system and to support the farmers with the cultivation and marketing of their crops in the long term. Due to low response by potential operators, this concept did not materialise. As a consequence, the irrigation scheme's productive potential was not exploited in full: the limited ability and willingness of the farmers to embark on the envisaged cropping innovations in the given environment (in particular to introduce high-yield crops like citrus fruits, some of which are perennial) impacted negatively on the outcome of the project. With the support of the consultant, the Management Unit maintained – in the form of a cooperative – responsibility for all operational, extension and management work. However, the entire staff were financed externally (by the Zimbabwean Government or FC). No serious efforts were made to transfer more responsibility for operations to the users until 2001, after a conceptual reorientation. Nonetheless, these adjustments were not seen through in full, due to the project becoming suspended for political reasons ion 2002.

Because of low revenue, high arrears (especially for water and electricity) and a massive maintenance backlog, the continued functioning of the cooperative as an economic entity is now seriously jeopardised.

Major findings of the results analysis and performance rating

Because of the lack of reliable and disaggregated data on harvests and income, the income and employment situation in the project region was compared with an otherwise similar region in which traditional rain-fed farming methods prevail. In comparison, significant improvements can be noted. The average annual household income generated from the sale of agricultural produce was almost USD 800 in 2009, with productivity and income varying widely between individual households. In summary, the project has contributed to prevent the affected population from declining into extreme poverty during the times of economic crisis, and has brought about a relative improve-

ment in the socioeconomic situation in the project area, also in terms of ensuring easier access to public services such as education and health care. Many farmers have proved that it is possible to make the transition from subsistence rain-fed farming to more intensive production for the market, even under extremely difficult conditions. What is missing is the functioning mechanisms that would enable efficient small farmers to expand further.

In macroeconomic terms the data required to comprehensively assess profitability are not available. However, cropping innovations have fallen well short of expectations, with most farmers sticking to traditional annual crops like maize and sweet potatoes. Yields recorded range between 50% and 75% of the potential, rather than 85% as planned, whilst average cropping intensity has been 90% - compared to 160% as planned. Considering those facts as well as the high investment, maintenance and operating costs as well as lacking sustainability prospects, fthe funds used, on loan terms, have not generated the returns that would be needed to ensure a satisfactory level of profitability.

The information available to us indicates that the majority of the target group must be considered poor. In line with the original project concept they initially played a limited part in designing and implementing the project. Since the concept was modified in 2001, the focus has increasingly shifted to participatory structures in the cooperative which continue to function at least at a rudimentary level. In spite of initial expectations, the project does not appear to have made significant contributions to advancing gender equality. In fact, the number of women-headed farming households in the project area is about one third lower than in the comparable areas examined.

The project was expected to lead to only minimal environmental risks by the incorrect use of plant protection agents, and deemed these to be controllable thanks to the expected expert back-up services. In fact there is little sign that the farmers were given any particular advice or assistance in the use of pesticides, neither before nor after the switch to the cooperative model. On the other hand the low level of intensification (due partly to the crisis) points to the actual environmental risk being lower at present at least than originally feared. Under 'normal' conditions, an appropriate recommendation would be required here.

The programme risks identified during project appraisal can be seen today as follows. Through its disastrous economic policy in general, and agricultural policy in particular, the Zimbabwean Government has failed to put in place an enabling environment for advancing private-sector based agricultural development. It remains debatable to what extent the government genuinely supported the privatisation approach even when tenders were being invited. In the course of the liberalisation of sales markets, the situation has improved slightly since mid-2009, but it has also become clear that large sections of Zimbabwean agriculture are not (or are no longer) competitive at international level. It is not the risk of falling world market prices that has proved to be the problem, but a) the need to achieve exportable quality, and b) access to export markets. Neither of these points was accorded any particular attention during the project appraisal, since it was expected that the professional, private-sector operation and cooperation with agricultural exporters (outgrower schemes) would resolve the problems. The project concept, which was innovative for Zimbabwe, could not be translated into practice, as laid out above. The business preconditions and the willingness of all stakeholders to put into practice the project concept were not properly identified in the project appraisal. No alternative scenarios were considered.

Immediate risks at present are being posed by the cooperative's precarious financial

situation and the extreme backlog of maintenance and repair work. In case of the scheme collapsing, the gradual disintegration of established project structures, compounded by the loss of expertise still available, would lead to a deteriorating socioeconomic situation in the project area. The remaining risks are high with respect to existing managerial capacities. These can only be overcome with massive external help. We do not believe that respective public sector agencies are currently in a position to bridge this gap.

Having compiled all the risks and impacts laid out above we assess the developmental impact of the project as follows:

Relevance (rating 3): The project did target a core problem of Zimbabwean agriculture in the communal areas, by aiming to ensure a more intensive and more productive use of scarce land resources – as the most important source of income in rural areas. The structural disadvantages in the communal areas (the lack of expertise, low level of capital reserves, difficulties in marketing produce) were to be overcome with the help of intensive cooperation with the private sector. From today's perspective, the problem analysis is basically correct and the approach selected appropriate, although the lack of any genuine will on the Zimbabwean side was underestimated. In addition, the project's (reduced) outcomes were subsequently largely outweighed by Zimbabwe's disastrous economic and sector policies. The scope and the operating concept would now appear to be replicable only to a limited extent. The development-policy objectives of the project are aligned to both the objectives of BMZ and the goals of the partner country.

Effectiveness (rating 4): Measured in terms of cropping intensity and the yields per area (see above), the project objective was not achieved. The planned rise in income was also achieved to a limited extent only. The effectiveness of the project was, however, strongly influenced by the unfavourable economic environment and it should 'normally' have fared better.

Efficiency (rating 4): In comparison to initial forecasts, investment and consulting costs have risen significantly and compare extremely unfavourably to the unsatisfactory cropping situation, yields and cropping intensity, compounded by highly uncertain sustainability prospects. Expectations have not been met, neither in terms of production efficiency nor in terms of allocation efficiency.

Overarching developmental impacts (rating 3): The project ought to have made a contribution to achieving the overall objective in so far as the correlation between relative intensification of cropping and expected income gains has emerged in spite of the extremely poor framework conditions in the sector, albeit at a significantly lower level than originally planned. With an income situation significantly above that of surrounding regions with prevailing traditional rain-fed agriculture, the project has, at least temporarily, contributed directly to achieving MDG 1 and thus indirectly to achieving MDGs 2 to 6. No broader – or structural – impact could be achieved beyond the project area's immediate confines, though.

Sustainability (rating 4): The continuation of the project as a cooperative under extremely difficult external conditions is clear evidence of the high level of commitment of the small farmers. At present, however, key sustainability criteria are not met: The cooperative is at the brink of insolvency, and it seems doubtful that it will ever be in a position to cover all its costs. Without doubt, the existing backlog of maintenance and repair work cannot be resolved without external assistance.

The clearly inadequate sustainability of the project and the unsatisfactory efficiency and effectiveness lead to an overall rating of 4 (unsatisfactory).

General conclusions

The idea of organising large communal areas embracing several hundred households on a commercial basis and crafting a successful transition from subsistence farming to cooperative, market-oriented irrigated agriculture for all, is ambitious and can only be achieved under favourable conditions. Future projects will have to focus more on the entrepreneurial capacities of the target group; alternatively – the partner agencies' genuine commitment provided – it will have to be ensured that required capacities can be provided on fair terms by the private sector. The failure to realise this within the scope of the project should at least have led to more radical replanning. Rather than simply transferring responsibility to a consulting firm, the reorientation to embrace an alternative participatory operating model with a clear allocation of duties, rights and obligations (which generally involves significantly more time and resources), that was not launched until 2001, should have been initiated at a much earlier stage.

Notes on the methods used to evaluate project success (project rating)

Projects are evaluated on a six-point scale, the criteria being relevance, effectiveness (outcome), "overarching developmental impact" and efficiency. The ratings are also used to arrive at a final assessment of a project's overall developmental efficacy. The scale is as follows:

1 Very good rating that clearly exceeds expectations

2 Good rating fully in line with expectations and without any significant shortcomings

3 Satisfactory rating – project falls short of expectations but the positive results dominate

4 Unsatisfactory rating – significantly below expectations, with negative results dominating despite discernible positive results

5 Clearly inadequate rating – despite some positive partial results the negative results clearly dominate

6 The project has no positive results or the situation has actually deteriorated

A rating of 1 to 3 is a positive assessment and indicates a successful project while a rating of 4 to 6 is a negative assessment and indicates a project which has no sufficiently positive results.

Sustainability is evaluated according to the following four-point scale:

Sustainability level 1 (very good sustainability)

The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability)

The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected.)

Sustainability level 3 (satisfactory sustainability)

The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.

Sustainability level 4 (inadequate sustainability)

The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The overall rating on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. A rating of 1 to 3 indicates a "successful" project while a rating of 4 to 6 indicates an "unsuccessful" project. In using (with a project-specific weighting) the five key factors to form an overall rating, it should be noted that a project can generally only be considered developmentally "successful" if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are considered at least "satisfactory" (rating 3).