**Application form for multi-annual projects**

**bengo**

**(Promotion of developmentally important projects of private German institutions)**

**Part II**

**CONTENT INFORMATION ON THE PROJECT**

***Project number: \*\*\****

***Project Country: Zimbabwe***

***Project title: To increase the resilience of farming households against climate change through Integrated Water Resource Management (IWRM) and Climate Smart Agriculture (CSA) in Southern Zimbabwe***

***Private carrier: Action for World Solidarity (ASW)***

***Potsdamer Str. 89***

***10785 Berlin***

***Project duration: 01.04.2023 until 31.03.2026***

***1.*** ***Information on the local implementing organisation***

**Summary**

Dabane is a rural development organization which has been working in Zimbabwe with some work in neighboring countries for over 30 years. As a local NGO Dabane has developed strong links with both rural communities and with local authorities in project development and in implementation. A board of 5 trustees has ultimate authority supported by a PVO registered, elected executive committee of 7 members. The day-to-day management is provided by the director and a staff management committee comprising of a programme manager, finance manager and a senior project manager. These co-ordinate activities through project officers and team leaders. Dabane has strong administrative, social and technical capability including digital systems to ensure that innovative and sustainable community based, and supportive development initiatives are implemented in the sectors of CSA, IWRM, Resilience and Food Security, Empowerment of Women, Rural Livelihoods and WASH.

***1.1 Contact details and contact person***

|  |  |  |  |
| --- | --- | --- | --- |
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***1.2 Legal form, institutional objectives, non-profit status***

Dabane is a Non-Governmental Organisation (NGO) registered both as a Trust (registration number MA 2011/92) and as a Private Voluntary Organisation (PVO) (registration number 15/2013). Dabane's mission is to support food security, environmental protection and sustainable economic production in the disadvantaged areas of Southern Africa, more specifically the Southwestern areas of Zimbabwe. This is done by improving the environmental and resource management in terms of water, moisture, soil and land. Dabane specializes in agriculture in arid and semi-arid regions, rain-fed crop production and irrigation from surface dry sand rivers. Building on indigenous knowledge, Dabane works to strengthen existing capacities in rural communities while providing access to new information. Beneficiaries can plan and prioritize their own development goals. In its cooperation with the villages, it is central for Dabane to ensure gender equality and to support women in assuming more control and responsibility within the household and also in the community.

***1.3 Personnel, technical and financial capacities, cooperation with other donors***

Dabane has a total of 36 staff members (15 men & 21 women), who are full-time employees, and 9 intern students (3M & 6F). Of the 36 staff, 14 have degrees, 7 have diplomas while the rest have between 10 and 30 years of experience in rural development and in their various skills. Dabane is a practical organisation with a strong and interactive social network and demonstration and training capacity with its own fabrication workshop for the manufacture of water abstraction, land tillage and crop production equipment. Dabane works with international donors such as USAID, BMZ, UKAID and the EU, as well as other Charity based organizations and ecumenical groups. Dabane develops innovative projects and works at the national level with Zimbabwean government extension service personnel, Local Government and parastatal staff. It works with international and other Zimbabwean NGOs on joint projects where it typically takes the lead in technical and water management issues. Dabane coordinates with Zimbabwean ministry and local government staff and participates in NGO forums. Finance is managed by a professional team of accountants (some with first degree or Association of Chartered Certified Accountants (ACCA) qualification) using Cloud ERP software. An organogram of Dabane is attached.

***1.4 Sectoral and regional scope, activities***

Dabane operates projects in the areas of environmental management, IWRM and CSA as well as water, sanitation and health (WASH) and income-generating activities. The organisation works mainly in the southwestern region of Zimbabwe, but also throughout the country, and occasionally in Malawi and Mozambique in cooperation with other NGOs. For 32 years it has been engaged with resource-poor communities, particularly in support of women in environmental and management issues, leading to improved water supply systems and increased food production and income. These include the development of small irrigation systems, the construction of weirs and sand dams, land rehabilitation programmes including soil, rainfall and moisture retention systems in the semi-arid areas. The focus is on training in the areas of environmental protection, sustainability and resilience, which were dealt with in recently successfully completed IWRM projects supported by BMZ and ASW in river micro-catchments.

***1.5 Relationship between private German agency and local project-executing agency in the developing country, evaluation and justification of cooperation***

The Action for World Solidarity (ASW) has supported Dabane since the organisation was founded more than 30 years ago. Even before official registration was granted, the ASW provided important start-up financing. This allowed Dabane to purchase a transport vehicle for the first time to implement measures to improve water supplies through an artisan support programme in rural dry areas. ASW has been funding Dabane, which is the implementing partner of the various projects being carried out. This was agreed on as a way of optimizing costs.

Thanks to its continuous support, Dabane has been able to develop continuously and win the trust of even larger donors. In the first half of the 1990s, Dabane was already able to build dams on its own, which, especially after the drought of 1992, was an important part of the civil society strategy to secure water supplies in Zimbabwe with the *Give A Dam* campaign. At the end of the 1990s, ASW funding shifted to the field of water extraction from groundwater reservoirs of surface-dry sand rivers in semi-arid rural areas. Pioneering work was carried out in this area with the help of the ASW. The results of this research led to the publication of the book *Water from Sand Rivers* by Stephen Hussey, Director of Dabane.

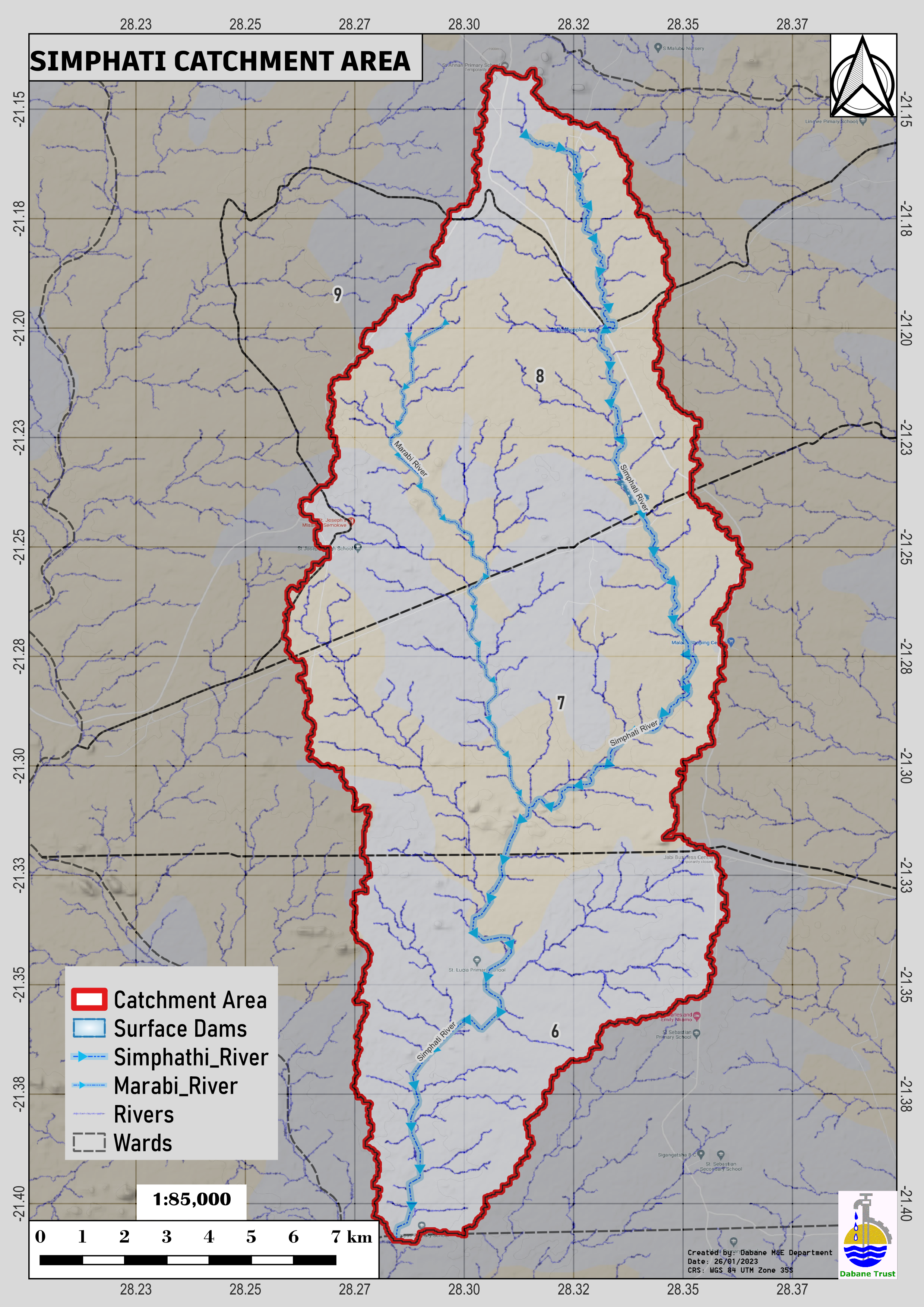
Overall, the cooperation is trusting, cooperative and respectful from both parties. In the years 2007, 2010 and 2011, Dabane received 20.000€ each of third-party funds from the Heidehof Foundation via the ASW. In 2010 a co-financing of 10.000€ by the company Senger Gebäudetechnik took place. The largest joint projects were successfully implemented from 2014-2018 (Euro 492.424); and 2019- 2022 (Euro 501.375) with funds from BMZ and ASW. The project officers of the ASW were able to convince themselves of the excellent work of Dabane through numerous project trips.

***2. initial situation / problem analysis*** *(relevance)*

**Summary**

Agricultural productivity in the project region is extremely low due to intermittent rainfall, a long 8-month dry season, infertile soils and soil degradation. Sporadic, heavy rainfalls lead to high and strong erosion rates and massive losses of topsoil and water. Under these conditions feed for animals is limited, the agricultural yields are weak, and the Community's resilience is compromised. Dabane will work with as many families as possible within the catchment area of the Simpathe river in the Matobo District. In this region, there is considerable migration of men to South Africa and Botswana so that more than 60% of households are effectively headed by women. The project region was selected because the extent of soil erosion and vegetation decline is particularly pronounced and Dabane has already established a well-functioning network with various stakeholders in the region. Under these conditions, the aim is to improve land, water and soil management in an integrated way to enable women and men to increase crop and livestock production and improve the management of natural resources in the area. Dabane developed the idea and planning for this project in workshops together with the communities and from the experience gained in successful strategies in other similar areas.

The socio-economic infrastructure in the target area is weak with most households dependent on survival agriculture with most trade conducted within the project region. There are no financial banks in the villages and payment is made either with cash or digitally by ECO-Cash. There are primary and a few secondary schools in the project area with education available up to 18 years of age. However, there is a continual decrease in numbers attending school so that only a few reaches the final Form 6 year with most children dropping out of school at grade 7, at an average of age of 12 years. The nearest hospital is in Tshelanyemba 20 kilometres from the project area. Although in poor condition the main road is paved from Bulawayo to 10kms after Maphisa, thereafter the road is a graded dirt road.



**Figure 1 Map of Simphathe Catchment Area**

***2.1 Initial situation and problem description***

The project covers the micro catchment area of the Simpathe River which is predominantly in Wards 8 and 9 of the Matobo district in Matabeleland in southern Zimbabwe (map and illustration of the project area above). The region has a four-month intermittent rainy season and an eight-month dry season. The annual evaporation is about four times the annual rainfall. Rainfall is sporadic and falls in short, severe storms, often some four weeks apart. This strongly fluctuating rainfall generally means that rain-fed crops are subjected to moisture-stress which significantly reduces yield. The soil is mostly characterized by infertile, immature granite sands, which overlie granite, gneiss or basalt resulting in a poor groundwater potential. As a result, there are many bare areas with no perennial vegetation, which are then exposed to erosion, especially when overgrazed by livestock.

Consequently, the regular production of staple foods and economic crops on the dryland fields is extremely difficult for rainfed agriculture alone. Cultivation systems based on climate-friendly small-scale agriculture with viable irrigation are an effective way of dealing with the consequences of climate change. When crop production fails or other emergencies arise, the sale of livestock is often the only security small-scale farmers have. Thus farmers attempt to keep as many livestock as possible, worsened by the ownership of livestock being closely linked to the status of a family. For these reasons, there tends to be too many livestock per hectare in the project area, which leads to overgrazing and further soil erosion.

The project will increase the use of idle agricultural land for forage production and promote the natural regeneration and afforestation of grazing land. The aim of this project is to maintain soil moisture through rainwater infiltration systems and to harvest as much runoff water as possible through weirs and sand dams. It is also about reducing erosion, improving the soil and maintaining moisture in the plant root zone to promote both crop production and grassland for economic livestock production.

In the past, close cooperation with the local authorities and with all families within the catchment area has proven its worth. Approximately 60% of households are predominantly female, with many men living in neighbouring countries due to poor formal employment opportunities in Zimbabwe. Traditionally, it is the responsibility of men to decide on crop production and animal husbandry even in absentia. This includes the question of whether or not animals can be sold to feed the family in difficult times. Since many women have in de facto to make all household decisions themselves, the improvement and promotion of women's decision-making ability, the responsibility of women within the community, the general confrontation with respect and participation in family and society are cross-cutting issues in this project.

These issues will be addressed by ensuring that women have the same say as men in the discussion, planning, decision-making and ultimate responsibility for the implementation, management and maintenance of the activities and results of the project. Through a civic science process, Dabane will support the beneficiaries in exchanging experiences and prioritising, using technical data, where land conservation and other rehabilitative measures are to be carried out to ultimately increase crop yields and improve basic food production and family wellbeing.

Since cooperation with existing local and state structures and institutions plays a central role in the success of the project, their composition, mandate and function are briefly explained here. The Rural District Council (RDC), Government extension officers, Zimbabwean Republic Police (ZRP), Office of the President and Cabinet (OPC), are democratic structures within the district. They are in the field of development work, offer technical advice, maintain law and order and give strategic policy direction and rationalize effective service delivery. *Traditional leaders* continue to be highly respected by the communities in the project target area. Leadership is with a traditional leader, a chief who leads a number of Headmen/Umlisa who in turn lead a Council, an assembly of *Sobhukus (kraal Heads)*. This assembly deals with local disputes, grievances and offenses and is empowered to engage people in community service. Its powers also include the promulgation of statutes relating to land use and management, for example, the allocation of land to families and projects for special purposes. The negotiations also include the areas in which trees and bushes are felled and when animals can graze in which areas. It also has the power to release arable land for Community grazing. All the powers of the *Sobhuku* make this body an essential partner of this project.

***2.2 Preparation of the project***

In the course of discussions already held in community review meetings, in which representatives of local authorities, government advisors and traditional leaders participated, the idea for this project emerged and the basic planning was initiated. Coordination with the local Councilors was agreed in community development planning meetings and the strategies presented in this document were developed. On the part of the authorities, representatives of the Rural District Council and Agricultural Rural Development and Advisory Services (ARDAS) (former AGRITEX) took part in the discussions.

From 2014-2018, and 2019-2023, similar projects with a similar package of measures has already been carried out in the catchment areas of the *Shake River* (project number: 2014.5532.8) and the *Lalatau and Shake Rivers* (project number 2019.4396). The acceptance of the project in the former project areas in the Gwanda and Matobo district were outstanding. The greatest successes of these completed projects has been:

* Methods of climate-dependent agriculture are being applied in the project area today on some 400 ha of land. In addition to a considerable diversification from mono-cropping, sorghum, peanuts, beans, bambara nuts have been introduced and the yield of important cereal varieties has increased by 75 %.
* Small farmers in the project region of the water catchment area of the *Shake River* have since the project began, been harvesting a variety of vegetables. Now carrots, butternut pumpkins, tomatoes and onions are grown in many places for personal consumption and sale. Diversification of nutrition contributes significantly to health.
* The density of vegetation in the project area has increased considerably. Areas of unproductive, idle land that were threatened by erosion are now covered with plants again. This protects the soil from erosion. The mean NDVI has increased from 0.42 to 0.7.
* The majority of the beneficiaries of this project were women at a percentage of at least 70%.
* Fodder plots were established with plants that included moringa, leucena and sesbania sesbania, pigeon pea, acacia albida and ugagu, fodder sorghum, velvet beans and different types of grass like bana grass were established as an environmental conservation measure to prevent soil erosion.
* Woodlots were established with planted indigenous trees such as tamarind, strychnaceae (umkhemeswane), guava, cross-berry (umsosobiyane), bird-plum (umnyi), ziziphus mauritiana (umsawa), chocolate berry (umtshwankela), velvet wild medlar (umviyo), pod mahogany (umkamba), monkey tree, acacia albida, snot-apple (uxakuxaku), red milkwood (umbumbulu), donkey-berry (ubhunzu) and water berry as well as fruit trees such as grapes, lemons, mango, pawpaw, avocado, mulberry and moringa.
* Sand dams, land rehabilitation and conservation areas and irrigation schemes were successfully established within the project area.

In the proposed project, Dabane will again work with communities in a participatory, "citizen-science" method, in which initiatives and activities are conceived and developed together with the people who will implement them. This includes the identification of existing indigenous knowledge as well as current information dissemination systems. It explores how knowledge and information systems can remain current and/or updated, while at the same time referring to cultural and traditional perceptions in order to remain acceptable to the community.

Dabane has extensive experience in supporting rural, resource-poor communities. Existing contacts and the results of sociological and technical research make it easier to identify needy communities and subsequently to reach those interested in improving their land use and water resources. In the project area, Dabane has implemented projects such as *Arid African Alluvial Aquifer Laboratories (A4labs);* Community empowerment through sustainable agricultural resource use, (CES Rural); Water Energy and Food Nexus (WEF Nexus), and *Promoting Resilience Livelihoods and Women Empowerment* (PRL&WE).

***3. direct/indirect target group***

**Summary**

In the project area there are 950 households with an average family size of 5.7 (Census 2022) persons and thus a total population size of 5,225 persons. Due to a lack of employment opportunities locally and a very permeable border with Botswana and South Africa, however as many as 60% of men are engaged in formal and informal employment in urban areas and neighbouring countries and come home only sporadically.

The population in the target communities lives primarily from subsistence agriculture. If someone also has a job, it is usually in the informal sector or in the diaspora. In this respect, it is difficult to measure how high the average income of the target group is. The population helps each other in culturally and traditionally anchored cooperation, such as when *Amalima* is practiced. The participants work together on a field for one day and eat together after the work is done. The next day everyone works together on the next field until all fields of the village have been worked. Apart from that there are outreach activities of the nearest hospital, which is dedicated to AIDS and nutrition in the villages.

The work in past projects has shown that it is usually much more successful and effective to work with whole communities and not only with a small number of project-related households. Therefore, Dabane aims to involve an average of 1.4 persons per household directly in the project activities (1 woman and in 40% of the households where the man is also 1 man, hence 1.4/household). This reaches a direct target group of 1,330 people. The direct target group benefits on the one hand from learning climate-adaptive measures in smallholder agriculture, as well as from improved precipitation and moisture conservation systems, improved land management and, in addition, increased vegetation on the communal rangeland and in their own fields.

The remaining population of 3,900 is the indirect target group. The direct and indirect target group benefits from the fact that the soils in the catchment area are better protected against erosion and thus more moisture is retained in the soil, making it more suitable for horticulture. Consequently, a contribution is made to food security.

In addition, a roughly equal number of people on the edge of the micro-catchment area will benefit from the additional products and conservation work within the catchment area. It can also be assumed that some people will replicate simple measures of the project. This observation was also made in the BMZ-funded projects completed in 2018 and 2022 respectively.

***4. impact matrix*** *(significance and effectiveness)*

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| --- |
| **Overall objective (Impact):**  **Year-round access to water for 2000 households in the micro-catchment of Simphathe river in Matabeleland, southern Zimbabwe, is improved, their food security and their resilience to the consequences of climate change strengthened.** |

|  |  |  |  |
| --- | --- | --- | --- |
| **project objective**  **(Outcome)** | **Indicators** (possibly plus quantity structure) | |  |
| initial value  (quantitative & qualitative) | Target value (target)  (quantitative & qualitative) |  |
| **Crop yields and income from livestock breeding of 2000 households in the project area are increased, the efficient use of water resources and water and soil moisture management are improved. The participation of women in water-related decision-making processes is strengthened.** | i. Degraded area: 0.1 to 0.2 normalised difference vegetation index (NDVI)  Soil erosion amounts to 10 to 20 tonnes per hectare per year.  ii. Crop yields are currently 0.3 - 0.8 tonnes per hectare for maize and 1-2 tonnes per hectare for millet species such as sorghum.  iii. Only 5 out of 12 months access to a reliable water source for irrigation and livestock breeding  iv. 66% of the project area without perennial grass and productive vegetation  v. Only 10% of households participate in spatial planning meetings and field activities on land use (management of stream banks, excessive deforestation, grazing in areas not designated, overstocking of animals)  vi. Poor water conservation systems available (no contour dams, infiltration ditches). Only 60 out of 2000 households use water conservation techniques  vi. Use of conventional cultivation methods that are no longer suitable in times of climate crisis (1000 out of 2000 households do not manage in an adapted manner) and lead to a reduction or loss of plant moisture.  vii. Small holder farmers in the micro catchment area make agricultural decisions according to outdated traditions and their intuition.  viii. Low yields of only 0.2-0.8 tonnes per hectare for staple foods such as maize | i. NDVI between 0,3 and 0,6  Soil erosion rate is reduced by 5% from 20 t/ha/year.    ii. Increase the yield of dry land crops such as sorghum, peanuts and eye beans by at least 50%.  iii. The time availability of water over the year is improved to 75% (9 out of 12months).  iv. At least 50 hectares of the unproductive bush areas have been recovered through improved natural management and used for fodder production.  v. 80% of households participate in spatial planning meetings and field activities.  vi. 25 % of 2000 households use water conservation techniques  vii. 80% of 2000 households use at least 7 CSA techniques and 35% of farmers use them to maintain the moisture in their fields  viii. Increase of crop yields by at least 50%. |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Subgoals**  **(Output)** | **Indicators** (possibly plus quantity structure) | |  |
| initial value  (quantitative & qualitative) | Target value (target)  (quantitative & qualitative) |  |
| Output 1:  **The organisation and efficiency of the IWRM committees improved and the participation of women in water-related decision-making processes strengthened.** | 1.1 There are only sporadic, disorganised agreements on the use of common water resources.  1.2 Only 25 % of women on committees participate actively in decisions. | 1.1. 80% of IWRM committees meet >4 times a year with a member presence of >80% (DRR Committee, NRM Committee, Water Point Committee, Dam Committee, Irrigation Committee).  1.2 Gender-equitable water management with 50% women in executive positions on committees. |  |
| Output 2:  **Aquifer Storage & Recovery (ASR) systems have been developed to reduce the loss of precipitation runoff and surface evaporation through infiltration into groundwater. The soil is stabilized by increased vegetation.** | 2.1. 40% of households have inadequate water availability for domestic and productive needs due to poor/limited infiltration and excessive drainage.  2.2. 185 km² of pastures are almost vegetation-free (NDVI of 0,1-0,2).  2.3 Limited availability of groundwater and surface water storage systems (3 weir and 1 sand dam for 2000 households). | 2.1 The availability of water for domestic and/or productive use has increased by at least 25% for 50% of households.  2.2. 5 % of 185 km² of grazing land reaches an elevated NDVI of 0,3-0,6 %.  2.3 Increasing the available groundwater and surface water storage systems to at least eight water abstraction and storage systems (sand dams/weirs/surface open dams). |  |
| Output 3:  **2000 smallholders know and have integrated IWRM practices.** | 3.1. 66% of the soils in the catchment area have low permeability (due to erosion, compacted surface, flat topsoil and/or impermeable subsoil, ledges or high subsoil).  3.2 High surface runoff due to dried out soils. | 3.1. 40% of soils in the eroded areas have been rehabilitated or erosion reduced.  3.2 Min. 30% of 2000 households use rainwater infiltration systems. |  |
| Output 4:  **Improved agricultural forestry and multiannual fodder production to increase income from livestock breeding have been developed.** | 4.1 Potential areas for the cultivation of forage crops lie fallow or the soil has dried up or eroded.  4.2 Non-functional/non-existent grazing land management that leads to poor animal condition and therefore low prices. A cow or ox can lose 90% of its sales value if in poor condition due to a shortage of fodder. | 4.1. 50 ha are planted with suitable Andropogonae, Poaceae fodder vegetation (fodder sorghum and millet, Sudan, Sudax, Bana grass, Brachiaria and stoloniferous grasses), and trees such as Leucaena, Mesquite.  4.2. A 20 % improvement in the condition and hence the revenue from the sale of livestock. |  |

***5. Activities, methods and instruments to achieve the objectives*** *(effectiveness and efficiency)*

***5.1 Timetable according to measures***

| ***Activity*** | | **1st project year** | | | | **2nd project year** | | | | **3rd project year** | | | | **4th project year** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |
| 1.1 Stakeholder and Community Leader inception meetings and at organisational, provincial and district level | |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.2. Community introduction workshops | |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.3. Baseline surveys and Endline surveys | |  | x |  |  |  |  |  |  |  |  |  |  | x |  |  |  |
| 1.4. Initial surveys and assessment of water sources and river channel in the project area | |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.5. Presentation of the collected data to participants | |  | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.6. Cultural, tradition and gender related roles and responsibility discussions and gender related water utilization and management planning workshops | |  |  | x |  |  |  | x |  |  |  | x |  |  |  |  |  |
| 1.7. Training of the various committees on their roles and responsibilities | |  |  | x |  |  |  |  |  |  | x |  |  |  |  |  |  |
| 1.8. Indigenous knowledge and information, collection planning dissemination workshops | |  |  | x |  |  |  |  |  |  | x |  |  |  |  |  |  |
| 1.9. Production and dissemination of stories of change and best practices information to stakeholders | |  |  | x |  |  |  |  | x |  |  |  | x |  |  |  |  |
| 1.10 Field monitors | |  | x | x | x | x | x | x | x | x | x | x | x | x |  |  |  |
| 1.11. Monitoring of activities and training | |  | x | x | x | x | x | x | x | x | x | x | x | x |  |  |  |
|  |
| 2.1. Land use planning, identification of appropriate measures | |  |  | x |  | x |  |  |  | x |  |  |  |  |  |  |  |
| 2.2. Training in runoff infiltration systems, aquifer recharge and soil retention systems | |  |  |  | x |  |  | x |  |  | x |  |  |  |  |  |  |
| 2.3. Surveys and assessments of areas for possible water harvesting sites | |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.4. Construction of water harvesting and storage systems by community members | |  |  |  |  | x | x | x | x | x | x | x | x |  |  |  |  |
| 2.5. Trainings on participatory health and hygiene measures, and development of health clubs | |  |  |  | x |  |  | x |  |  | x |  |  |  |  |  |  |
| 2.6. Conservation and environmental management planning workshops | |  |  |  |  | X |  |  | x |  |  | x |  |  |  |  |  |
| 2.7. Field monitors | |  | x | x | x | x | x | x | x | x | x | x | x | x |  |  |  |
| 2.8. Monitoring of activities carried out | |  | x | x | x | X | x | x | x | x | x | x | x | x |  |  |  |
|  |
| 3.1. Demo’s and training in dryland minimal tillage systems, sub-soiling, basin planting etc. | |  |  | x |  |  |  | x |  |  | x |  |  |  |  |  |  |
| 3.2. Promoting conservation agriculture systems to strengthen the introduction of climate dependent agriculture and land use practices. | |  |  |  | x |  | x |  |  |  |  | x |  |  |  |  |  |
| 3.3. Development of small irrigation systems, and water abstraction systems, as well as demonstrations and construction of additional irrigation systems. | |  |  |  |  |  | x |  |  | x |  |  |  |  |  |  |  |
| 3.4. Training in effective water management and storage systems for higher yields in both arable and irrigated gardens | |  |  |  | x |  |  |  | x |  | x |  |  |  |  |  |  |
| 3.5 Training in the maintenance and use of water abstraction and irrigation systems for smallholder farmers who have access to productive water for irrigation. | |  |  |  |  |  | x |  |  |  | x |  |  |  |  |  |  |
| 3.6 Training in balanced food production for dryland and irrigation farmers | |  |  | x |  |  |  | x |  |  |  | X |  |  |  |  |  |
| 3.7 Field monitors | |  | x | x | x | x | x | x | x | x | x | x | x | x |  |  |  |
| 3.8. Monitoring of land management and crop production systems | |  | x | x | x | x | x | x | x | x | x | X | x | x |  |  |  |
|  |
| 4.1. Establishment of fodder production demonstration plots | |  |  |  | x | x |  |  | x | x |  |  |  | x |  |  |  |
| 4.2. Afforestation and planting of grass on areas of bare ground. | |  |  |  |  |  |  |  | x |  |  |  | x |  |  |  |  |
| 4.3. training in the use of fodder crops and forage trees. | |  |  |  |  | x |  |  | x |  |  |  | x |  |  |  |  |
| 4.4. Training and demonstrations of improved grazing land management. | |  |  |  | X | x |  |  |  | x |  |  | x |  |  |  |  |
| 4.5 Showcasing IWRM and CSA systems to the local authorities, neighbouring community leaders and farmers | |  |  | x |  | x |  | x |  |  | x | X |  |  |  |  |  |
| 4.6 Look and learn visits to promote improved land management, increased adoption of CSA techniques and holistic management of livestock. | |  |  | x |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 4.7 Field monitors | |  | x | x | x | x | x | x | x | x | x | x | x | x |  |  |  |
| 4.8. Monitoring of activities carried out | |  | x | x | x | x | x | x | x | x | x | X | x | x |  |  |  |

***5.2Project Activities - Description, Methods and Instruments****(incl. contributions to capacity building at the project executing agency and target group organisations)*

In this project, Dabane is again fighting against the consequences of climate change and is training smallholder farmers in climate smart agriculture with all its principles to increase crop yields and improve nutrition. An important component of the project is the development of knowledge on how to deal with the consequences of climate change and the communication of measures to enable adapted agriculture. It will also show how soils can be protected from erosion, how water reservoirs can be built and how new sources of feed for livestock can be created respectively. Exchange visits will be used to allow farmers to learn first-hand from other farmers.

In addition to training in climate smart agriculture, the beneficiaries also work together to identify the areas most severely affected by climate change in the catchment areas of the river. On the basis of the resulting stocktaking, a participatory decision is then made as to which activities are best undertaken, where. Dabane provides technical advice and moderates the process. Finally, the scope of the activities to be implemented depends on the size of the existing budget. Calculations were made on the basis of empirical values from the previous project.

Depending on the outcome of the participatory planning, Dabane implements different construction activities. For example, Dabane builds dams and weirs in sand rivers to construct water harvesting reservoirs and assists farmers to increase water availability to their crops through rainfall-to soil infiltration systems. When irregular, extremely heavy rainfalls wash away the top layers of the soil and start to wash channels into the soil, Dabane inserts appropriate environmental conservation works gabion to curb this.

A core instrument of Dabane's work is the construction of sand dams. There are many sand rivers in Zimbabwe; these are rivers that usually do not carry surface water. However, if one digs in the sand water is easy reached. With a sand dam in such a river, a water reservoir is created which stores significantly more water and over time creates small oases that with a small pump can be used to irrigate nearby gardens. For this reason, vegetable gardens are often planted nearby and irrigated by either photovoltaic or manual water pumps. In conjunction with construction activities, committees are formed and trained in the maintenance and repair of the infrastructure and equipment.

The individual activities per output are listed and associated with the respective budget lines. The costing basis is:

Transport: 0,73 € / km

Handouts / writing material: 0,46 € / person

Catering per meal: 4,59 € / person

Refreshments for workshops: 0,55 € / person

Snacks for participating stakeholders: 0,92 € /person

Meals for extension officers: 4.59 €/ person

Accommodation: 13.76 € / person

The high-performance laptops calculated under 1.1.2 will be purchased for the finance manager who needs a high-performance laptop to provide financial analysis of the project and to advise the project managers and technicians on financial management of the project. The finance department also needs a powerful laptop to best utilise the CloudERP system Dabane has for project management and accountability. The remaining two high-performance laptops will be of great assistance to the technical staff to use programs such as the Arc Gis, Modflow, Q-Flow, Google Earth, Crop Wat, Auto Cad and Envi software that Dabane has.

Three laptops (1.1.3) are required for the trainers, assistants and monitoring and evaluation (M&E) staff involved in the project. They need the computers to prepare data, create presentations and to gather information to create reports and to maintain the database. The M&E department will need high performance laptops to run high upgrade software like Statistical Package for Social Science (SPSS) for data analysis, picture and video editing software that includes Photoshop, After Effects, Adobe Premiere Pro, Corel Draw and Corel Video Studio.

The working clothes calculated under 1.2.5 serve to protect the beneficiaries and employees when working under adverse conditions such as handling rock when constructing sand dams and gabions and when digging infiltration trenches and wells. For a total *of 794.84* Euros, 24 overalls at 14.83 Euros (total 355.81 Euros), 12 pairs of rubber boots at 5.54 Euros (total 66.43 Euros), 12 pairs of safety shoes at 25,21 Euros (total 302,55 Euros) and 24 pairs of working gloves at 2,92 Euros (total 70.04 Euros) are purchased.

The budget line software licenses includes one tenth of the fees, i.e. an amount of 2,200 Euro for CloudERP and 1,208 Euro for Arc GIS. The software is needed for mapping and proper financial management of the project. Some of the software in need of licensing is Adobe suite and Microsoft Office suite.

The procurement costs estimated at €1,433 under 1.2.8 include project specific audit costs and costs for the inspection, purchase and collection of goods and services and costs for determining that the correct goods and services are being offered and purchased, including physical material testing, return of incomplete and/or damaged goods and use of delivery or collection services.

The operating costs of the Office (1.2.9) are as follows:

6,167.57 € electricity (9% of the total cost of electricity)

1.298.57 € water (2% of the total cost of water)

2,597.14 € municipal fees (4% of the total costs for municipal fees)

4,869.00 € telephone (7% of the total cost of telephone)

4,869.00 € Insurance (7% of the total cost for total insurance costs)

8,439.43 € Internet (12% of the total cost of Internet)

3.307.96 € consumables including printer cartridges (5% of the total cost of consumables)

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| --- | --- |
| **Output 1: The organisation and efficiency of the IWRM committees improved and the participation of women in water-related decision-making processes strengthened.** | |
| 1.1 Stakeholder and community leader inception meetings at organizational, province and district levels | 1x2 day inception meeting at organizational level to introduce the program to staff members   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 introductory talk | qty | unit | unit costs | Total | | Transport to talks | 50 | Km | 0,73 € | 36.70 € | | Handouts / writing materials | 25 | pcs. | 0,46 € | 11.47 € | | Catering: 2 employees x 2 days | 50 | pcs. | 4,59 € | 229.50 € | |  |  |  | **Total** | **277.67 €** |   2x1 day introductory interviews with 25 participants of the competent authorities in the first year (PA, District Administrator, Rural District Council, Catchment Council) by 2 Dabane staff members.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 introductory talk | qty | unit | unit costs | Total | | Transport to talks | 260 | Km | 0,73 € | 190.83€ | | Catering: 2 employees x 2 days | 4 | pcs. | 4,59 € | 18,35 € | | Transport to authorities | 150 | Km | 0,73 € | 110.09€ | |  |  |  | **Total** | **319.27 €** |   x 3 = 916.20 €  Inception workshops  1 x 1 day workshop in the first year at District Level and 2 Dabane staff to explain the strategy, the new approach to involve participants and beneficiaries.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 workshops | qty | unit | unit costs | Total | | transport | 300 | Km | 0,73 € | 220.18 € | | Handouts / writing materials | 25 | pcs. | 0,46 € | 11.47 € | | Catering: 4 employees x 2 days + 25 stakeholders x 1 day | 29 | pcs. | 4,59 € | 133.03 € | | Reimbursement of travel expenses for 25 participants | 25 | pcs. | 18.35 € | 458.72 € | |  |  |  | **Total** | **823.39 €** |   4x1-day workshops at ward level in the first year with 4 community representatives and two Dabane-staff to explain the project, the strategy, the new approach to involve participants and beneficiaries.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 workshops | qty | unit | unit costs | Total | | transport | 175 | Km | 0,73 € | 128.44 € | | Handouts / writing materials | 100 | pcs. | 0,46 € | 45.87 € | | Catering: 4 employees x 2 days + 25 stakeholders x 2 meals x 1 day | 10 | pcs. | 4,59 € | 45.87 € | | Refreshments for 100 participants | 100 | pcs. | 0,55 € | 55.05 € | | Accommodation: 2 employees x 1 nights | 2 | pcs. | 13.76 € | 27.52 € | |  |  |  | **Total** | **302.75 €** |   x 5 = 2.034.40 €  *Budget: 2,950.60 € (from 1.1. Output 1)* |
| 1.2 Community introductory workshops | 8x1 day community mobilisation meetings with an average of 45x8 (villages) participants in the first year at village level. Interviews will be conducted to advise and evaluate the local situation and the social structure of 2 Dabane employees.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 workshops | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Handouts / writing materials | 25 | pcs. | 0,46 € | 11.47 € | | Catering: 2 employees x 5days + 5 stakeholders x 5days | 35 | pcs. | 4,59 € | 160.55 € | | Refreshments for 360 participants (45x8) | 360 | pcs. | 0,55 € | 198.17 € | | Accommodation: 2 employees x 4 nights | 8 | pcs. | 13.76 € | 110.09 € | |  |  |  | **Total** | **920.64 €** |   x 1 = 920.64 €  *Budget: 920.64€ (from 1.2. Output 1)* |
| 1.3 Baseline and end-line surveys | 1x10 days basic survey through focused group discussions (FGD) is conducted in the first year with approximately 500 beneficiaries and 5 stakeholders by 5 Dabane employees.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 FGD - Basic survey | qty | unit | unit costs | Total | | transport | 1560 | Km | 0,73 € | 1.144.95 € | | Handouts / writing materials | 5 | pcs. | 0,46 € | 2.29 € | | Catering: 5 employees x 10 days + 5 stakeholders x 10 days | 100 | pcs. | 4,59 € | 458.72 € | | Refreshments for 500 participants | 500 | pcs. | 0,55 € | 275.23 € | | Accommodation: 5 employees x 9 nights | 45 | pcs. | 13.76 € | 619.27 € | |  |  |  | **Total** | **2.500.46 €** |   *Budget: 2,500.46€ (from 1.3.1. Output 1)*  Final evaluation (in the 4th year)   |  |  |  |  |  | | --- | --- | --- | --- | --- | | final evaluation | qty | unit | unit costs | Total | | transport | 2600 | Km | 0,73 € | 1.908.26 € | | Handouts / writing materials | 67 | pcs. | 0.46 € | 30.73 € | | Catering: 5 employees x 15 days + 10 stakeholders x 15 days + 5 stakeholders x 5 days | 250 | pcs. | 4,59 € | 1.146.79 € | | Refreshments for 480 participants (60x8 villages) | 480 | pcs. | 0,55 € | 264.22 € | | Accommodation: 5 employees x 14 nights | 70 | pcs. | 13.76 € | 963.30 € | | Daily rates external evaluator | 30 | days | 321.10 € | 9.633.03 € | |  |  |  | **Total** | **13.946.33 €** |   *Budget: 13.946.33€ (from 1.3.2 evaluation)* |
| 1.4 Initial surveys and assessment of water sources and river channels in the project area | 1x1 day per site x 8 technical feasibility and evaluation studies by 3 employees with community members and stakeholders in the first year.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 survey | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 3 employees x 5 days + 5 stakeholders x 5 days | 40 | pcs. | 4,59 € | 183.49 € | | Refreshments for 5 participants from 4 villages for 4 days | 20 | pcs. | 0,55 € | 11,01 € | | Accommodation: 3 employees x 4 nights | 12 | pcs. | 13,76 € | 165.14 € | |  |  |  | **Total** | **800.00 €** |   x 2 = 1.600.00 €  *Budget: 1,600.00 € (from 1.4. Output 1)* |
| 1.5 Presentation of the collected data to participants | 8x1-day feedback workshops (1 at district level, 4 at ward level) to report on the results of the surveys in the first year:  25 participants at district level   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 workshop | qty | unit | unit costs | Total | | transport | 300 | Km | 0,73 € | 220.18 € | | Catering: 2 employees x 25 stakeholders for 1 day | 27 | pcs. | 4,59 € | 123.85 € | | Transport Refund: 25 council members | 25 | pcs. | 18.35 € | 458.72 € | |  |  |  | **Total** | **802.75 €** |   100 at ward level   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 workshop | qty | unit | unit costs | Total | | transport | 450 | Km | 0,73 € | 330.28 € | | Catering: 2 employees x 4 days | 8 | each | 4,59 € | 36.70 € | | Meal : 100 participants per ward | 400 | each | 0,92 € | 366.97 € | | Accommodation: 2 employees x 3 nights | 6 | each | 13.76 € | 82.57 € | |  |  |  | **Total** | **816.51 €** |   X2 = 1,619,27  *Budget: 1,619.27 € (from 1.5. Output 1)* |
| 1.6. Cultural, traditional and gender related roles and responsibility discussions and gender related water utilization and management planning workshops | 8x1 day x 3 years (2023, 2024, 2025) Discussion workshops on data collection to identify the perception and analysis of roles and responsibilities of men and women and the prejudices to which women farmers are exposed as de facto heads of households. The strategy of engagement is to involve as many families as possible from whole communities and participate in community-based management (CBM) and gender analysis workshops.  The discussion will identify and analyse cultural practices and the traditional roles and responsibilities of women and girls, men and boys. It addresses issues such as the inequality of typical gender-specific responsibilities related to the procurement and management of water, fuel and food resources for the family:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 discussion workshop | qty | unit | unit costs | Total | | transport | 1000 | Km | 0,73 € | 733.94 € | | Catering: 3 employees x 5 days + 2 stakeholders x 5 days | 25 | pcs. | 4,59 € | 114.68 € | | Meal: 360 participants (45 x 8 villages) | 360 | pcs. | 0,92 € | 330.28 € | | Accommodation: 3 employees x 4 nights | 12 | pcs. | 13.76 € | 165.14 € | |  |  |  | **Total** | **1,344.04 €** |   x 3 = 4,032.11 €  *Budget: 4.032.11 € (from 1.6. Output 1)* |
| 1.7 Training the various committees in their roles and responsibilities: Disaster Risk Reduction (DRR), Natural Resource Management (NRM), Dam Committee (DC), Grazing land Associations, Irrigation Committees, Water point Committees, Health Clubs | 1x2 days x 2 years (1st and 3rd year) Training of the various committees in their roles and responsibilities (DRR, NRM, Dam Council, Farmers and Commodity Associations) at Ward and Village level:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 training | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Handouts / writing materials | 35 | pcs. | 0,46 € | 16,06 € | | Catering: 2 employees x 2 days+ 2 stakeholders x 10days | 40 | pcs. | 4,59 € | 183.49 € | | Meals: 35 committee members x 8 villages x 1 day | 280 | pcs. | 0,92 € | 256.88 € | | Accommodation: 2 employees x 8 days | 16 | pcs. | 13.76 € | 220.18 € | |  |  |  | **Total** | **1,116.97 €** |   x 2 = 2,233.94 €  *Budget 2,233.93 € (from 1.7. Output 1)* |
| 1.8. planning workshops for the dissemination of indigenous knowledge and other information | 4x1 day x 2 years (2023, 2025) Discussion workshops on the approach of civic science to make the design and development of initiatives and activities both relevant and acceptable, and to explore the importance of local practices, taboos and opinions and the identification of indigenous knowledge:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 planning workshop | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 3 employees x 5 days + 2 stakeholders x 5 days | 25 | each | 4,59 € | 114.68 € | | Meal: 240 participants (60x 4 wards) | 240 | each | 0,92 € | 220.18 € | | Accommodation: 3 employees x 4 nights | 12 | each | 13,76 € | 165.14 € | |  |  |  | **Total** | **940.37 €** |   x 2 = 1.880.73 €  *Budget: 1,880.73 € (from 1.8. Output 1)* |
| 1.9. Production and dissemination of stories of change and best practices information to stakeholders. | 8x1 day x 3 years (2023, 2024, 2025) per village Best practice documentation (1 per output). Data and information are collected from stakeholders; studies/research, experimental and demonstration material are correlated, recorded, and analysed, leading to the development and review of guidelines and the publication of guidelines by recognised academic publishers:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 workshop | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 2 employees x 5 days + 2 stakeholders x 5 days | 20 | pcs. | 4,59 € | 91.74 € | | Accommodation: 2 employees x 4 nights | 8 | pcs. | 13.76 € | 110.09 € | |  |  |  | **Total** | **642.20 €** |   x 3 = 1.926.61 €  *Budget: 1,926.61 € (from 1.9. Output 1)* |
| 1.10 Field Monitors | Project Monthly Reports on Projects x 3 years   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 - Field Monitors | qty | unit | unit costs | Total | | Field Monitors | 12 | each | 98.62 € | 1,183.49 € | |  |  |  | **Total** | **1,183.49 €** | | x 3 = 3,550.46 €  *Budget: 3,550.40 € (from 1.10. Output 1)* | | | | | |
| 1.11. Monitoring of activities and trainings | 1 per year x 3 years x 5 days basic monitoring visit to assess knowledge levels presiding discussions on cultural, traditional and gender roles and responsibilities and gender-specific water use in water management planning workshops, and also the trainings on various committees, by 5 Dabane employees:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 - Basic monitoring | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 5 employees x 5 days + 2 stakeholders x 5 days | 35 | pcs. | 4,59 € | 160.55 € | | Accommodation: 5 employees x 4 nights | 20 | pcs. | 13.76 € | 275.23 € | |  |  |  | **Total** | **876.15 €** |   X 3 = 2,628.44 €  *Budget: 2,628.44 € (from 1.11. Output 1)* |
| **Output 2: Aquifer Storage & Recovery (ASR) systems have been developed to reduce rainwater runoff loss and surface evaporation by infiltrating groundwater. The soil is stabilized by increased vegetation.** | |
| 2.1. land use planning, identification of appropriate measures - mapping and evaluation of runoff protection, infiltration and soil conservation systems to identify appropriate activities | 1x8 days x 3 years land use and soil mapping workshops to support communities in evaluating, planning and implementing activities. The process begins with extensive data collection, land use mapping, analysis of the extent of well managed and problematic land areas, and practical tests such as infiltration and erosion susceptibility:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 workshop | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Handouts / writing materials | 480 | pcs. | 0,46 € | 220.18 € | | Catering: 2 employees x 5 days + 2 stakeholders x 5 days | 20 | pcs. | 4,59 € | 91.74 € | | Meal : 480 participants (60 x 8 villages) | 480 | pcs. | 0,92 € | 440.37 € | | Accommodation: 2 employees x 5 nights | 10 | pcs. | 13,76 € | 137.61 € | |  |  |  | **Total** | **1.330.28 €** |   x 3 = 3,990.83 €  *Budget: 3,990.83 € (from 2.1. Output 2)* |
| 2.2. Training in runoff infiltration systems, aquifer recharge and soil retention systems | 1x8 villages x 3 years (2023, 2024, 2025) Demonstration and construction of additional irrigation using flood water conductors, diversion channels, horseshoe catchment systems and other water use systems such as infiltration pits and ditches:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 training | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 2 employees x 5 days + 3 stakeholders x 5 days | 25 | pcs. | 4,59 € | 114.68 € | | Meal: 45 participants in 8 villages | 360 | pcs. | 0,92 € | 330.28 € | | Accommodation: 2 employees x 4 nights | 8 | pcs. | 13.76 € | 110.09 € | |  |  |  | **Total** | **995.41 €** |   X 3 = 2,986.24€  1 Material requirements for additional demonstration of moisture management   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | qty | unit | unit costs | Total | | Stones | 150 | M3 | 6.07 € | 910.50 € | | Filling material | 150 | M3 | 3.43 € | 514.50 € | | Gabion material | 15 | each | 49.25 € | 738.75 € | |  |  |  | **Total** | **2,163.75 €** |   X 3 = 6,491.25€  *Budget: 9,477.49 € (from 2.2. Output 2)* |
| 2.3 Surveys and assessments of appropriate water catchment sites | 1x5 days (in the first year) Social surveys to identify communities both in terms of social and ecological needs, technical field and site surveys to identify suitable areas for catchment development, site identification and design:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 survey | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 2 employees x 5 days + 5 stakeholders x 5 days | 35 | each. | 4,59 € | 160.55 € | | Accommodation: 2 employees x 4 nights | 8 | each. | 13,76 € | 110.09 € | |  |  |  | **Total** | **711.01 €** |   x 1 = 711,01€  *Budget: 711.01 € (from 2.3 Output 2)* |
| 2.4. Construction of water catchment and storage systems by community members | 5x 1 Tag Watershed Management Trainings workshop.  >100m3 Materials (rock, concrete, subsoil, reinforcement mats, jack hammer, JCB, water pumps, compressor, bowser, trailer, shutter ring and truck) used in gabions, weirs, sand dams or earth dam walls for water extraction and conservation in the catchment area:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 workshop | qty | unit | unit costs | Total | | transport | 175 | Km | 0,73 € | 128.44 € | | Handouts / writing materials | 480 | pcs. | 0,55 € | 264.22 € | | Catering: 2 employees x 4 days + 2 stakeholders x 4 days | 24 | pcs. | 4,59 € | 110,09 € | | Meals: 60 x 8 villages | 480 | pcs. | 0,92 € | 440.37 € | | Accommodation: 2 employees x 3 nights | 6 | pcs. | 13.76 € | 82.57 € | |  |  |  | **Total** | **1,025.69 €** |   x 3 = 3,077.06 €   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 Construction Material requirements | qty | unit | unit costs | Total | | cement | 500 | Pckg. | 11.93 € | 5.963,30 € | | stones | 450 | m3 | 6,07 € | 2.731.50 € | | sand | 450 | m3 | 6,07 € | 2.731.50 € | | Filling materials (slate / clay) | 450 | m3 | 6,95 € | 3.127.50 € | | iron | 30 | m | 49,25 € | 1.477,50 € | | Construction site equipment and dismantling | 1600 | Km | 1,83 € | 2.935.78 € | | small tools | 100 | pcs. | 13,06 € | 1.306,00 € | | boarding | 24,7 | m2 | 9,24 € | 228,23€ | | Builders | 6.5 | units | 606.63 € | 3,943.11 € | |  |  |  | **Total** | **24.444,42 €** |   x 2 = 48.888,84 €   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 Construction measure Implementation | qty | unit | unit costs | Total | | Catering: 4 employees x 20 days | 80 | pcs. | 4,59 € | 366.97 € | | Snack: 80 participants x 120 days | 9600 | pcs. | 0,92 € | 8.807.34 € | | Accommodation: 4 employees x 16 days | 64 | pcs. | 13.76 € | 880.73 € | |  |  |  | **Total** | **10,055.05 €** |   x 1 = 10.055.05 €  The calculation includes all materials used for the construction of water extraction and storage systems and the construction of sand dams, small dams and soil protection measures in the project. Dabane believes it is important that the budget specifies the maximum volume that can be built, rather than the number and nature of systems to be built. Otherwise, the budget would have to be renegotiated after the feasibility studies. This approach has been accepted and proven in the previous and completed project.  *Budget:*  *48,888.84 € (from 1.1.1. investments)*  *Budget 13,132,11 € (from 2.4. Output 2)* |
| 2.5. Trainings on participatory health and hygiene measures, and development of health clubs | 1x8 villages x 3 years (2023, 2024, 2025)trainings on PHHE and development of health clubs:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 training | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Handouts / writing materials | 480 | pcs. | 0,46 € | 264.22 € | | Catering: 2 employees x 5 days + 3 stakeholders x 5 days | 25 | pcs. | 4,59 € | 114.68 € | | Meals: 60 participants in 8 villages | 480 | pcs. | 0,92 € | 440.37 € | | Accommodation: 2 employees x 4 nights | 8 | pcs. | 13,76 € | 110.09 € | | x 3 = 4,109.17 €  *Budget 4,109.17 € (from 2.5. Output 2)* | | | | | |
| 2.6 Conservation and environmental management planning workshops | 1 day x 8 villages x 3 years (2023, 2024, 2025) Workshops on nature conservation planning and environmental management to develop increased awareness together with general community mobilisation and involvement of local government structures. It underlines the need for nature conservation and environmental management:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 workshop | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 2 employees x 5 days + 3 stakeholders x 5 days | 25 | pcs. | 4,59 € | 114.68 € | | Meals: 60 participants x 8 villages | 480 | pcs. | 0,92 € | 440.37 € | | Accommodation: 2 employees x 4 nights | 8 | pcs. | 13,76 € | 110.09 € | |  |  |  | **Total** | **1,105.50 €** |   x 3 = 3,316.51 €  *Budget: 3,316.52 € (from 2.6. Output 2)* |
| 2.7 Field Monitors | Project Monthly Reports on Projects x 3 years   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 - Field Monitors | qty | unit | unit costs | Total | | Field Monitors | 12 | each | 98.62 € | 1,183.49 € | |  |  |  | **Total** | **1,183.49 €** | | x 3 = 3,550.46 €  *Budget: 3,550.46 € (from 2.7. Output 2)* | | | | | |
| 2.8. Monitoring of activities carried out | 1x5 days basic monitoring visit to monitor trainings on runoff infiltration systems, aquifer recharge and soil retention systems; surveys and assessments of appropriate water catchment sites; constructed water catchment and storage; established sand dams, small dams and conservation works; and trainings on participatory health and hygiene measures, and developed health clubs, by 5 Dabane employees.     |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 - Basic monitoring | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 5 employees x 5 days + 5 stakeholders x 5 days | 50 | pcs. | 4,59 € | 229.36 € | | Accommodation: 5 employees x 4 nights | 20 | pcs. | 13.76 € | 275.23 € | |  |  |  | **Total** | **944.95 €** | | x 3 = 2,834.86 €  *Budget: 2,834.86 € (from 2.8. Output 2)* | | | | | |
| **Output 3: 2000 small farmers know and have integrated IWRM practices.** | |
| 3.1. Demonstration and training in dry and minimum tillage systems, sub-soiling, basin planting, etc. to ensure increased use of CSA techniques | 1 x 8 villages x 3 years Demonstrations and training in the application of rain-fed minimum tillage systems in arid areas (subsoil tillage, ditches and infiltration pits, storm canals, contour dams, etc.):   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 performance | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 2 employees x 5 days + 3 stakeholders x 5 days | 25 | pcs. | 4,59 € | 114.68 € | | Meal: 45 participants x 8 villages | 360 | pcs. | 0,92 € | 330.28 € | | Accommodation: 2 employees x 4 nights | 8 | pcs. | 13.76 € | 110.09 € | |  |  |  | **Total** | **995.41 €** |   x 3 = 2,986.24 €  *Budget: 2,986.24 € (from 3.1 Output 3)* |
| 3.2. Promoting conservation agriculture practices to strengthen the introduction of climate dependent agriculture and land use practices. | 1x3 days x 8 villages x 3 years training in climate sensitive agriculture (CSA) on arable land and irrigated gardens to improve crop yields and food security:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 training | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 2 employees x 5 days + 3 stakeholders x 5 days | 25 | pcs. | 4,59 € | 114.68 € | | Meal: 45 participants x 8 villages | 360 | pcs. | 0,92 € | 330.28 € | | Accommodation: 2 employees x 4 nights | 8 | pcs. | 13.76 € | 110.09 € | |  |  |  | **Total** | **995.41 €** |   x 2 = 1,990.83 €  Budget: 1,990.83 € (from 3.2 Output 3) |
| 3.3. Development of small irrigation systems, and water abstraction systems, as well as demonstrations and construction of additional irrigation systems. | Irrigation system x 2 years (2nd and 3rd year)  This requires surveys, assessments, drafts, demonstrations and training in appropriate water abstraction systems and small irrigation systems specific to a site. Micro- and small irrigation systems will be set up and training in efficient horticulture, irrigation and crop production will be provided.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 2 irrigation systems | qty | unit | unit costs | Total | | Photovoltaic water pumping system | 1 | pcs. | 5.587,65 € | 5.587.65 € | | irrigation material | 11250 | per m | 0,31 € | 3.487.50 € | | perimeter fence | 600 | m | 4,63 € | 2.778.00 € | | Transport | 1000 | Km | 0,73 € | 733.94 € | | Material Delivery | 1000 | Km | 1,83 € | 1.834.86 € | | Water abstraction investigations, planning and supervision of installation work | 4 | units | 346.65 | 1,386.59 | | Installation of water extraction and irrigation systems | 4 | units | 346.65 | 1,386.59 | |  |  |  | **Total** | **17,195.13 €** |   x 2 = 34.390,27 €   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 2 Irrigation systems Implementation | qty | unit | unit costs | Total | | Catering: 2 employees x 4 days | 8 | pcs. | 4,59 € | 36,70 € | | Accommodation: 2 employees x 3 days | 6 | pcs. | 13.76 € | 82.57 € | |  |  |  | **Total** | **119.27 €** |   x 1 = 119.27 €  *Budget:,34,390.27 € (from 1.1.1. investments)*  *119.27 € (from 3.3 Output 3)* |
| 3.4 Training in effective irrigation and moisture storage systems with low water requirement, for higher yields in both rainfed and irrigated gardens. | 1x3 days x 8 villages x 3 years (2023, 2024, 2025) Training in effective irrigation and moisture storage systems with low water requirements:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 Training | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 2 employees x 4 days + 3 stakeholders x 4 days | 20 | pcs. | 4,59 € | 91.74 € | | Meals: 20 participants 3 days | 60 | pcs. | 0,92 € | 55.05 € | | Accommodation: 2 employees 3 nights | 6 | pcs. | 13.76 € | 82.57 € | |  |  |  | **Total** | **669.72 €** |   x 3 = 2,009.17 €  *Budget: 2,009.17 € (from 3.4. Output 3)* |
| 3.5. Training in the maintenance and use of water abstraction and irrigation systems for smallholder farmers who have access to productive water for irrigation. | 8x3 days x 2 years irrigation scheme training: intensive horticultural production training in irrigated gardens for improved, diverse family nutritional needs; housing of livestock in mobile stables for direct spreading of slurry in dry backyard gardens is encouraged:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 Training | qty | unit | unit costs | Total | | transport | 600 | Km | 0,53 € | 440.37 € | | Handouts / writing materials | 20 | pcs. | 1.83 € | 36.70 € | | Catering: 2 employees x 4 days + 3 stakeholders x 4 days | 20 | pcs. | 4,59 € | 91.74 € | | Meal: 20 participants x 3 days | 60 | pcs. | 0,92 € | 55.05 € | | Accommodation: 2 employees x 3 nights | 6 | pcs. | 13.76 € | 82.57 € | |  |  |  | **Total** | **706.42 €** |   x 2 = 1,412.84 €  Budget: 1,412,84 € (from 3.5. Output 3) |
| 3.6. Training in balanced food production for dryland and irrigation farmers | 1x3 days x 8 villages x 3 years training in balanced food production systems including demonstrations for improved nutrition:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 training | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Handouts / writing materials | 480 | pcs. | 0,46 € | 220.18 € | | Demonstration on balanced food production and materials | 1 | pcs. | 366.97 € | 366.97 € | | Catering: 2 employees x 5 days + 3 stakeholders x 5 days | 25 | pcs. | 4,59 € | 114.68 € | | Meal: 60 participants x 8 villages | 480 | pcs. | 0,92 € | 440.37€ | | Accommodation: 2 employees x 4 nights | 30 | pcs. | 13.76 € | 412.84 € | |  |  |  | **Total** | **1,555.05 €** |   x 3 = 4,665.14 €  *Budget: 4,665.14 € (from 3.6. Output 3)* |
| 3.7. Field Monitors | Project Monthly Reports on Projects x 3 years   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 - Field Monitors | qty | unit | unit costs | Total | | Field Monitors | 12 | each | 98.62 € | 1,183.49 € | |  |  |  | **Total** | **1,183.49 €** | | x 3 = 3,550.46 €  *Budget: 3,550.46 € (from 3.7. Output 3)* | | | | | |
| 3.8. Monitoring land management and crop production systems | 15 x quarterly participatory monitoring (12 community reviews by Dabane staff and 3 annual monitoring visits by AWS) of status on gender roles, groundwater reservoirs, CSA, land and water status, livestock and agroforestry to identify best practices and evaluate work carried out:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 participatory monitoring | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Printing of tools | 480 | pcs. | 0,46 € | 220.18 € | | Catering: 2 employees x 5 days | 10 | pcs. | 4,59 € | 45.87 € | | Accommodation: 2 employees x 4 nights | 8 | pcs. | 13.76 € | 110.09 € | |  |  |  | **Total** | **816.51 €** |   x 3 = 2,449.54 €  *Budget: 2,449.54 € (from 3.8. Output 3)* |
| **Output 4: Improved agricultural forestry and multi-annual fodder production to increase income from livestock breeding have been developed.** | |
| 4.1 Establishment of fodder production demonstration plots. | 8 villages Demonstration and promotion of perennial fodder plants for animal nutrition in the dry winter months in unused dry areas:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 demonstration area | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 2 employees x 5 days + 3 stakeholders 5 days | 25 | pcs. | 4,59 € | 114.68 € | | Meal:60 participants x 8 villages | 480 | pcs. | 0,92 € | 440.37 € | | Accommodation: 2 employees x 4 nights | 8 | pcs. | 13.76 € | 110.09 € | |  |  |  | **Total** | **1.105.50 €** |   x 4 = 4.422.02 €   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 Material requirements for additional irrigation | qty | unit | unit costs | Total | | Fodder trees and plants | 500 | per hectare | 1,83 € | 917.43 € | |  |  |  | **Total** | **917.43 €** |   x 4 = 7,339.45 €  *Budget:*  *7,339.45 € (from 1.1.4. investments)*  *4,422.02 € (from 4.1. Output 4)* |
| 4.2 Afforestation and planting of grass on bare areas | 8 x 1 ha per village x 3 years Demonstration areas for the cultivation of native tree and grass species to improve land cover:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 afforestation | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Handouts / writing materials | 480 | pcs. | 0,46 € | 220.18 € | | Catering: 2 employees x 5 days + 3 stakeholders x 5 days | 25 | pcs. | 4,59 € | 114.68 € | | Meal: 60 participants x 8 villages | 480 | pcs. | 0,92 € | 440.37 € | | Accommodation: 2 employees x 4 nights | 8 | pcs. | 13.76 € | 110.09 € | |  |  |  | **Total** | **1.325.69 €** |   x 3 = 3,977.06 €   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 Material requirement for reforestation | qty | unit | unit costs | Total | | Native tree species | 850 | units | 1,83 € | 1,559.63 € | | Different Grass Species | 850 | units | 1,83 € | 1,559.63 € | |  |  |  | **Total** | **3,119.27 €** |   x 8 = 24.954,13 €  *Budget:*  *24,954.13 € (from 1.1.4. investments)*  *3,977.06 € (from 4.2. Output 4)* |
| 4.3 Training in the use of fodder crops and forage trees. | 1x3 days x 8 villages x 2 years Training in livestock breeding (disease control, management, production, feeding, feed production to improve livestock farming and income from livestock sales):   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 training | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Handouts / writing materials | 360 | pcs. | 0,46 € | 165.14 € | | Catering: 2 employees x 5 days + 3 stakeholders 5 days | 25 | pcs. | 4,59 € | 114,68 € | | Meal: 45 participants x 8 villages | 360 | pcs. | 0,92 € | 330.28 € | | Accommodation: 2 employees 4 nights | 8 | pcs. | 13.76 € | 110.09 € | |  |  |  | **Total** | 720.23 € |   x 2 = 1,440.37 €  *Budget: 1,440.37€ (from 4.3 Output 4)* |
| 4.4 Training and demonstration of improved management of grazing land. | 1x3 days x 8 villages x 3 years Training and demonstration of improved land management on pastures (canyon rehabilitation, grass cultivation, erosion reduction):   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 training | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 2 employees 5 days + 3 stakeholders 5 days | 25 | pcs. | 4,59 € | 114.68 € | | Meal: 45 participants x 8 villages | 360 | pcs. | 0,92 € | 330.28 € | | Accommodation: 2 employees x 4 nights | 8 | pcs. | 13.76 € | 110.09 € | |  |  |  | **Total** | **995.41 €** |   x 3 = 2,986.24 €   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 Material requirements for demonstration purposes | qty | unit | unit costs | Total | | Wire for the gabions | 2 | pcs. | 51.38€ | 102.75 € | | tools | 1 | set | 198.17 € | 198.17 € | |  |  |  | **Total** | **300.92 €** |   x 8 = 2,407.34 €  *Budget:*  *2,407.34 € (from 1.1.1. investments)*  *2,986.24 € (from 4,4. Output 4)* |
| 4.5 Effective IWRM and CSA systems showcased to neighboring farmers, traditional leaders and local authorities the improved condition of livestock, | 8x1-day field days with representatives of the Mzingwane Catchment, traditional Chiefs, Matobo Ward Councilors and officials of the Rural District Council and neighboring community leaders and farmers:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 Presentation IWRM and CSA | qty | unit | unit costs | Total | | transport | 800 | Km | 0,73 € | 587.16 € | | Award / expense allowance | 8 | set | 458.72 € | 3,669.72 € | | Catering: 3 employees x 3 days + 3 stakeholders x 3 days | 18 | pcs. | 4,59 € | 82.57 € | | Meal: 100 participants x 8 villages | 800 | pcs. | 0,92 € | 733.94 € | | Accommodation: 3 employees x 2 nights | 6 | pcs. | 13.76 € | 82.57 € | |  |  |  | **Total** | **4,568.81 €** |   x 3 = 13,706.42 €  The public presentation of the 8 best small holder farmers who have implemented the IWRM and CSA systems outstandingly well has proven itself in past projects, as the ambition of the small farmers to succeed with the new methods increases significantly. The 8 best farmers will receive a one-time compensation of 500 USD for the provision of their land for demonstration purposes and in recognition of their outstanding performance.  *Budget: 13,706.42 € (from 4.5. Output 4)* |
| 4.6 Look and learn visits to promote improved land management, increased adoption of CSA techniques and holistic management of livestock. | 2x1-day visits of the farmers in the Shake catchment area (BMZ funded project), so that the small farmers of this project can learn from the successes of the old project:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 Presentation IWRM and CSA | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 4 employees x 2 days | 8 | each | 4,59 € | 36.70 € | | Meal: 20 participants | 20 | each | 4,59 € | 91.74 € | | Accommodation: 3 employees x 1 night | 3 | each. | 13.76 € | 41.28 € | |  |  |  | **Total** | **610.09 €** |   x 2 = 1,220.18 €  *Budget: 1,220.18 € (from 4.6. Output 4)* |
| 4.7 Field Monitors | Project Monthly Reports on Projects x 3 years   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 - Field Monitors | qty | unit | unit costs | Total | | Field Monitors | 12 | each | 98.62 € | 1,183.49 € | |  |  |  | **Total** | **1,183.49 €** | | x 3 = 3,550.46 €  *Budget: 3,550.46 € (from 4.7. Output 4)* | | | | | |
| 4.8. Monitoring of activities carried out | 1x5 days basic monitoring visit to monitor established demonstration areas for feed production; planted grass on areas with low vegetation; trainings on animal husbandry; and trainings and demonstrations of improved land management on pasture land to increase the area under fodder production, by 5 Dabane employees:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 1 - Basic monitoring | qty | unit | unit costs | Total | | transport | 600 | Km | 0,73 € | 440.37 € | | Catering: 5 employees x 5 days + 5 stakeholders x 5 days | 50 | pcs. | 4,59 € | 229.36 € | | Refreshments for 60 participants 8 villages | 480 | pcs. | 0,55 € | 264.22 € | | Accommodation: 5 employees x 5 days + 5 stakeholders x 4 nights | 20 | pcs. | 13.76 € | 275.23€ | |  |  |  | **Total** | **1.209.17 €** | | X3 = 3,627.52 €  *Budget: 3,627.52 € (from 4.8. Output 4)* | | | | | |

***5.3 Project Accompanying Activities, Coordination and Monitoring***

Operational management is the responsibility of a team of Project Managers led by the Director of the organisation. A Program Manager coordinates the various projects of Dabane and sets the direction for a project. A Project Officer is responsible for the project strategies and supervises the staff for the training and practical implementation of the field activities. The Project Manager is supported by a team leader who is responsible for the implementation of the activities. A Financial Manager is responsible for financial accounting and financial management. The manager is supported by an accountant, a purchasing manager, a warehouse clerk, a bookkeeper and a receptionist. A full organisational chart of the organisation is attached.

As the exact number and scope of activities with the target group will be identified and managed by the beneficiaries, the project team will hold regular coordination meetings to maintain flexibility with adequate and effective management and monitoring and to ensure that project objectives are achieved. Involving the population in the project area, traditional and local governance and authorities, parastatal and state officials and other NGOs active in the district ensures that there is no duplication, overlap or contradictory recommendations or activities. Dabane therefore not only coordinates procedures and activities internally, but also participates in district council meetings, subcommittee meetings and NGO coordination meetings, where project information can be exchanged and possible overlaps corrected.

An integrated monitoring and reporting system exists, with appropriate coordination and monitoring, which is crucial to the success of Dabane projects, and to ensure that such a wide range of activities with so many participants can be carried out smoothly. This includes weekly reporting and planning meetings with employees in the areas of project management, training, field and project monitoring. An M&E representative collects the information from the field, provides the information with corresponding photos with coordinates, maps and a dashboard, and uses this as the basis for the quarterly reports. Project-related data is processed and stored in a Spatial Database such as PostGIS. The project will be supported by ASW staff throughout its duration. After completion of the project, a final evaluation will be carried out by an external evaluator to assess the objectives achieved, and the overall success of the project.

Dabane has extensive management experience and a wide range of technical equipment for project management. In addition, there are enough vehicles available for both personnel and material transport. The technical equipment includes small dam construction equipment ranging from shovels and lorries to tractors and trailers to transport the locally available materials collected by the beneficiaries. There is also a small craftsman's workshop for repairing and maintaining equipment and manufacturing equipment for soil protection or minimal tillage. In addition, Dabane has both manually operated and photovoltaic water extraction equipment.

***5.4 Personnel expenses***

Since its foundation in 1990, Dabane has actively supported initiatives for integrated water resource management (IWRM) and climate smart agriculture (CSA). The employees are made up of academics with technical surveying and design skills as well as people within the operational areas who have acquired their knowledge in the workplace. All employees are committed to working with and supporting community members in a comprehensive and accessible manner. In the Dabane team, there are native speakers of seven national languages, which often leads to good cooperation and acceptance in the communities. One of Dabane's strengths is a fast and accurate assessment of possible dry land water sources and specialization in the storage and abstraction of water from surface dry sand rivers. This enables Dabane to help remote, resource-poor communities in particular. All employees have strong social skills and know the cultural customs in the project area. In addition, they are accustomed to dealing sensitively with gender and disability issues. Project implementation staff are supported by research, monitoring, evaluation and reporting staff. Dabane operates a comprehensive financial and management system (CloudERP) by employees trained to operate from the procurement of services, materials and equipment to the preparation of the final financial audit.

Dabane designs, tests, develops and builds manually or photovoltaically operated water abstraction equipment for domestic, animal water supply and small-scale irrigation. In this context, the company is working with local users to develop minimum tillage and water conservation equipment. The facilities include a craft workshop that is fully equipped to manufacture and test equipment before it is tested in the field or installed at project sites.

The staff directly involved in the project are:

|  |  |  |  |
| --- | --- | --- | --- |
| **position** | **accountability** | **name** | **% of Employment for the project** |
| Director | Project management, technical support | Stephen Hussey | 6% |
| Project Manager - Gender and Social Awareness | Project management, gender and social awareness training | Joyce Dube | 10% |
| Finance Manager | Financia reporting and auditing | Thembinkosi Bhebhe | 8% |
| Finance officer | Financial records and reports | Sibusisiwe Ngwenya | 60% |
| Commissioner for Water, Environment and Conservation (WEC officer) | Project implementation, coordination with stakeholders, social interaction, training in agriculture, animal husbandry, water, environment & conservation work | Sibusisiwe Ncube | 100% |
| Hydrologist | Hydrogeological investigations, planning and supervision of construction works | Nobubelo Ngwenya | 30% |
| Monitoring and Evaluation  (M&E officer) | Project monitoring and report generation | Bukhosi Khumalo | 60% |
| Student Interns (Dev studies, | Support of WEC- and M&E-Officer (3. year professional experience before the last academic year) | Changing annually | 100% |

A complete organisation chart of Dabane is attached.

Experience from the last BMZ-funded project has shown the importance of dialogue, discussion, planning, preparation and training with the beneficiaries. To achieve this satisfactorily it is necessary to employ a project manager to 100% for this project who will be responsible for conducting workshops, training and practical field activities with the support of other professionals.

Salaries are unable to keep abreast of inflation as Dabane has to contend with the Zimbabwean Tax Agency's (ZIMRA) stringent requirements. Salaries have effectively been reduced as employee earnings in US dollars are converted into the local Zimbabwe dollar (ZWL) currency for taxation purposes resulting in employees being taxed at a higher rate. Payments to ZIMRA are then converted back to the US dollar for payment in US dollars. The ZWL launched at par with the US dollar is currently at 831.8147 *(****source* RBZ: date 08.02.2023**) to the US dollar 1.00 with a street rate which Dabane cannot use in excess of 1,000 to 1.

***6. Interaction with other actors***

**Summary**

The implementation strategy for the project is based on cooperation and coordination with local, community-based and traditional leaders as well as with local government staff and government agricultural advisory services. Agreements that enable a development organisation to work in an area are made with the local Rural District Council (RDC) which coordinates the activities of NGOs within the district. Each district has district local Councilors that attend council meetings and form committees in which NGOs are encouraged to participate. This creates interaction and knowledge about the organizations and activities that operate within a district.

Stakeholders of the project include local government, ward councils, the district administrator and rural district council. The district administrator has a direct link to the central government and to the government's advisory services. The district council has a staff of employees, including a project manager and a district engineer who is responsible for roads and infrastructure in the district. In the district council offices, the district councils meet in committees and subcommittees responsible for the management of water resources. These include subcommittees dealing with water and hygiene issues at village, community and district level and Disaster Risk Reduction (DRR) committees.

In addition, there are a number of government advisory services with parastatal (semi-public) staff to provide agricultural advice (AARDS) and assistance in crop production and livestock management with the Department of Veterinary Services and Department of Irrigation and Mechanization for irrigation planning. The Ministry of Health runs clinics and promotes very effective health clubs through the advice of *Environmental Health Technicians,* (EHT’s). There are also government ministries dealing with women's affairs, gender, youth, small and medium-sized enterprises, meteorology and mining. Parastatal institutions include the *ZINWA (Zimbabwe National Water Authority),* which is responsible for river basin management, the *EMA (Environmental Management Authority)* for environmental management, the *DDF (District Development Fund)* for water supply and forestry officials. All these institutions and officials may be asked for advice and participation in project activities.

There are also various NGOs in the project area. These include the organisations such as Sustainable Agricultural Technologies (*SAT)*, which concentrates on grazing land management and fodder production, Caritas on Agro-ecology, and Zimbabwe Humanitarian and Development Trust *(ZHDT)*dealing with environment and Internal Lending and Saving Schemes( ISALS) This project will complement these existing initiatives in promoting the resilience of farmers in the community through climate resilient agriculture, land and water management and livestock feed production

***7. Risks and risk-reducing measures***

**Summary**

Despite the experience and success of the previous project, on which this project is based it cannot automatically be assumed that it will be accepted in another region. There is often an inevitable reluctance to change from old agricultural systems which have been practiced for about 100 years, and resistance to adapt to current climate-resilient agricultural practices. Communities are brought together with local leaders to avoid pre-conceived ideas, misunderstanding and prejudice. The aim is to ensure that everyone is informed of ‘climate-smart’ strategies, developments and plans throughout the community. In this way, and by involving government advisors and respected traditional leaders’ agreement can be reached on conservation and development initiatives, and resistance to new systems can be countered. An information system will be established via WhatsApp groups to communicate weather related information as well as new findings and methods.

| **Risk** | **Comment / Description** | **Reduction** |
| --- | --- | --- |
| 1. Extreme droughts, insufficient rainfall for a rise in the water level of rivers in the region during the implementation phase | The effect of the measures in terms of moisture management, conservation work, increases in livestock production, land rehabilitation, afforestation, sand dams and irrigated gardens will vary considerably. | The timing of the measures will be chosen so that the few expected precipitations can be best utilized. |
| 2. The inhibition and reluctance of many women to participate in the project in a self-determined way | Women are reluctant to take up meaningful leadership positions on committees because they are afraid of being excluded or violating traditional practices. | Gender-specific workshops for men and women (including traditional leaders) |
| 3. Cultural and religious boundaries that prevent the participation of women | Cultural norms and taboos that prevent the meaningful participation of women in projects. | Workshops conducted for cultural, traditional and religious leaders to participate in initial discussion, planning, mobilization and training workshops. Implementation of *Community visioning (CV) and Community Based Management* (CBM) ensure that these issues are *mainstreamed,* and that women and men are constantly involved in the debate. |
| 4. Weak economic development and high inflation rates | Negative effect on project implementation due to costs increasing continuously leading to difficulties in implementing some activities. | If a disbursement is possible within 6 weeks, ASW may transfer the funds to Dabane's account in Botswana and then Dabane to transfer funds to Zimbabwe only when needed.  Materials can then be purchased in fixed currency and in large quantities.  Implementation of procurement procedures such as comparative bid analysis in order to ensure an optimal price-performance ratio. |
| 5. low participation of community members due to drought | Increase in emigration.  Communities join organizations that distribute food and cash leading to low participation in unpaid project activities. | Visit the successful fields of past projects to increase the motivation of the smallholder farmers. |
| 6. The shrinking of the operating environment due to political elections | Increased operating costs due to the need for transportation and allowances for Office of the President and Cabinet (OPC) and members of the Zimbabwe Republic Police (ZRP) as their presence in every workshop is mandatory. | Monthly and weekly reports as well as plans to be submitted to OPC, ZRP and Rural District Council (RDC).  To ensure that MOUs are current.  Increased utilisation of digital communication platforms. |

***8. On sustainability*** *(structural, economic, social, ecological)*

**Summary**

The project is supported by the community and stakeholders and is based on information, data and local knowledge sharing. The activities to be carried out, the organisation, the location and the prioritisation are the responsibility of the participants and generally require the extensive approval of local council in the micro catchment area. Improved land management and aquifer storage & recovery (ASR) systems, primarily comprising low-tech solutions, are implemented. Participants would have organised and developed their own water drainage and infiltration systems both on their own land, where they would have full and complete control, and on municipal pastures.

The success of the previous project has shown that sustainability is greatly enhanced by the significant contribution of local authorities and leadership in the project. When traditional leaders participate customs dictate that the rest of the community must follow, and so a considerable number of people are involved, encouraging each other with the existing local leadership to minimize disagreements. The *Sobhuku* - the advisers of the traditional chief - have the power to enact statutes regarding land use and management, animal movement and grazing systems. They are authorised to convene meetings of persons and to settle disputes. In this way, people can be encouraged to maintain and continue their land rehabilitation work beyond the duration of the project. If government advisory services are involved throughout the life of the project, they will continue to work with communities and support measures such as the creation of infiltration trenches and contour banks that can be implemented without the use of financial resources.

The project will train various committees, such as the Disaster Risk Reduction (DRR), Lead Farmers, Grazing Land Committee, Garden Committees, Natural Resource Management (NRM), Farmers and Commodity Associations and Waterpoint Committees, to maintain their knowledge and skills and to continue implementation under the leadership of local leaders. The various committees and associations will be trained in responsibilities for maintenance and repair of water storage and abstraction infrastructure. The farmers' associations exchange information on the success of the use of IWRM and CSA methods and disseminate the knowledge. The product associations discuss the storage and marketing of agricultural products. The success of this strategy has been demonstrated in the previous project in which the communities continue to operate pasture management under the direction of the local leadership. Sustainability is reinforced by the community approach, as the methodology is based on widespread community participation, decision-making and implementation. The Community Based Management (CBM) methodology applied also promotes community participation and management, thus improving the ownership of the project participants.

One of the lessons learned from the previous project was the need for greater participation by the population. This increases the probability that erosion control, soil, water and moisture management measures that people can carry out themselves during the course of the project will be maintained and also continued beyond the duration of the project. In this way greater sustainability is achieved. The continuing threat of the COVID-19 pandemic has shown the need to reduce physical contact with communities as the sole means of implementing projects. Making use of digital platforms can reach a greater number of people and also reduce the cost of physical visits and training. PHHE and Health clubs are an important component when dealing with water supply projects. Thus, the communities are capacitated and trained in good hygiene practices when dealing with water. Popular competitions as an activity have been seen to increase the participation and morale of communities and helps people to easily grasp and master concepts. Another lesson learned was not to disadvantage children and the elderly who were too young and too old to participate in community projects. Family members engaged in development activities are unable to assist those left at home. Providing food provisions to project participants on construction sites disadvantaged the young, the old and the disabled, hence food-for-assets has been adopted as a strategy to ensure that not only the working people are fed, but also those who are unable to provide for themselves, so that they are not disadvantaged.

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