

**BURKINA FASO: The Building Resilience and Adaptation to Climate Extremes and Disasters Programme (BRACED)** 



Ways out of extreme poverty, vulnerability and food insecurity (AVE)

GOOD PRACTICE SERIES

**Jana Herold** 

# The Building Resilience and Adaptation to Climate Extremes and Disasters Programme (BRACED) in Burkina Faso

The Building Resilience and Adaptation to Climate Extremes and Disasters Programme (BRACED) implemented by Welthungerhilfe and Self Help Africa supported poor and vulnerable households on the densely populated Mossi plateau in Burkina Faso. Activities included the establishment of productive infrastructure such as vegetable gardens or wetland rice production, as well as the donation of agricultural inputs, training courses on sustainable resource management and the provision of climate-related and phytosanitary information. The overall objective of the programme is to improve people's food security and increase climate resilience.

According to the beneficiaries, BRACED has made important contributions to their food security in terms of food availability, food access, food utilisation and its stability. Concurrently, the activities have contributed towards improving their economic situation and reducing poverty. Thereby, beneficiaries' resilience was overall strengthened. Besides, BRACED's social effects on the communities and above all on gender equality and women's empowerment should be emphasised. Since beneficiaries were organised in producer groups and motivated to work together, they felt that the social relationships among them were enormously strengthened. Communities have been pulled together more strongly, which led to an improvement of the mutual help and support in the villages. Furthermore, beneficiaries stated that BRACED's activities have created a new spirit of open-mindedness, especially regarding women's involvement and participation in decision-making at the household level. The activities and their results have made most men understand the significance of their wives' contribution to the household's wellbeing as well as their importance for the general development of the village, although participation in decision-making at the village level still requires more efforts and time.

These positive effects notwithstanding, it should be noted that the beneficiaries' assessments and evaluations have hardly taken into account the future of the activities initiated by the project. However, BRACED has sought to lay a solid foundation for farmer groups to continue these activities.

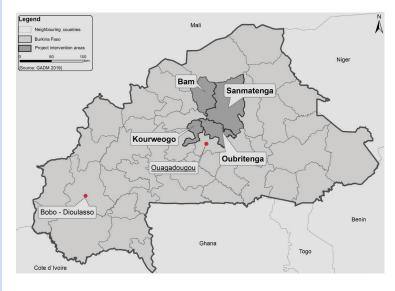
The project can be considered as a *Good Practice* given that it helps the poor rural population to reduce

poverty and food insecurity and become more resilient against climate threats.

Food security, resilience, smallholder farmers, climate change, poverty reduction, gender, Burkina Faso

#### **Country and project background**

Despite an increase of Burkina Faso's Human Development Index by 48% from 2000 to 2017, the country still remains at the end of the global ranking (position 183 out of 188 countries). Likewise, with respect to its Gender Inequality Index, Burkina Faso ranks only at 145 out of 160 countries (UNDP 2019).



Burkina Faso has a population of around 19,193,382 inhabitants (2017), of which more than half are younger than 25 years (World Bank 2019). According to the international poverty line of 1.90 US\$ a day (in 2011 PPP), 43.7% of Burkina Faso's population can be considered as poor (as of 2017, World Bank 2019). While relative poverty has decreased from 51.1% (2001) to 40.1% (2017), the absolute number of poor people has increased due to the fast population growth (World Bank 2019). Burkina Faso's food security situation is likewise precarious. Poverty is particularly pronounced in rural areas, where 90% of the poor live (World Bank 2016: 43). In the two regions of the BRACED's interventions - the Plateau Central and Centre Nord – the poverty rate is between 47% and 59%, thus also above the national average (INS 2018).

Most of the rural population work in the agricultural sector. However, productivity is comparatively low and subsistence farming dominates (World Bank 2016). Besides, the country's rain-dependent agriculture is increasingly affected by climate change induced weather extremes, particularly droughts. Further factors compromising agricultural production, and hence Burkina Faso's overall development, are overgrazing, poor soil quality, and deforestation (CIA 2019).

In the context of the Building Resilience and Adaptation to Climate Extremes and Disasters Programme (BRACED), Welthungerhilfe and Self Help Africa supported around 192 villages in the densely populated Mossi plateau in the centre of the country to build and increase people's resilience against climate extremes and at the same time improve their economic and food security situation. The programme was funded by the British Department for International Development (DFID) and implemented in Burkina Faso from January 2015 to May 2019. While the BRACED project in Burkina Faso is officially called "BRES" (Building Resilience) and "BRES-X" (successor project) by DFID and the BRACED Fund Manager, the beneficiaries in Burkina Faso call it BRACED. Therefore, in this study, BRACED is used to refer to the BRES / BRES-X project carried out in Burkina Faso.

#### Objectives and activities of the project

The overarching goal of the project is to improve food security and increase climate resilience by explicitly targeting the poorest and most vulnerable people.

Main areas of interventions Provision of Composting Market gardening information Wetland rice Local rainfall Improved seeds production Activities Cassava production Information systems Zaï technique weather forecasts via community radios Poultry breeding Exploitation of nonproducts

BRACED's main areas of intervention are the establishment of productive infrastructure aiming at market-oriented agricultural production, the support for soil conservation agriculture via natural resource management techniques as well as the building and strengthening of institutions for the provision of climate-related and phytosanitary information.



Productive infrastructure was established for activities such as irrigated vegetable production (during the dry season), wetland rice production, as well as cassava production and cassava processing. In the vegetable gardens, BRACED constructed hand dug wells, basins and, at least in some cases, a network of pipes to transport water to all corners of the gardens. In collaboration with the beneficiaries BRACED also installed some light solar pumps and a few conventional motor pumps. Reinforced dikes and sluices were constructed in low-lying areas suitable for rice production. Poultry producers received materials and equipment for the construction of poultry shelters. In addition, BRACED trained beneficiaries, among others, on the different cultivation techniques for rice production or vegetable gardens and on poultry breeding.

The support for soil conservation agriculture included courses on the different natural resource management techniques, such as composting or the *Zai* technique. With the *Zai* technique, small planting pits are filled with organic matter, e.g. compost or manure. It is a traditional soil and water conservation measure of the Sahel zone that helps to collect runoff and to improve groundwater recharge, root penetration and soil fertility, leading to improved yields of the crops

(UNEP 2019). It can be applied manually, which is more labour intensive, but also mechanically by using ploughs. BRACED promoted both types of techniques. In 2018, the project also distributed ripper ploughs to support donkey-drawn ripping of fields for the *Zaï* practices, which led to further improvements.

Furthermore, BRACED supported the provision of climate-related and phytosanitary information and training courses on rainfall monitoring and weather forecasts in order to strengthen beneficiaries' capacity to anticipate and adapt to climate extremes.

A research team of the Institute of Development and Peace (INEF) of the University of Duisburg-Essen visited four villages of the four project provinces in January and February 2019 in order to assess the project's effects and impacts as perceived by its beneficiaries. In all villages, focus group discussions based on BRACED's participatory outcome mapping toolbox were conducted. It included i) different cross-cutting themes (access to tools/equipment, agricultural inputs and infrastructure; access to markets; access to land; nutrition and dietary diversity), ii) a trend analysis that aimed at measuring the changes and impacts of BRACED's activities with regard to a range of items at the output, outcome and impact level, and iii) gender aspects. The latter topic was discussed with women and men in separate focus group discussions, respectively. For a more in-depth discussion of the methodology and the findings of this study see Herold (2019).



### **Project impact**

Overall, the BRACED project in Burkina Faso had a positive impact. Poverty was reduced by an increase of

incomes through the sale of agricultural products from the market gardens but also from farmers' own fields where they used High Yielding Drought Tolerant cereal seeds (also known as "certified improved seeds") and other seeds provided by BRACED. These improved seeds are better adapted to shorter rainy seasons with more variable climatic conditions, and they have better yields under drier sub-optimal conditions than conventional seeds. They are cultivated by selected local seed producers and should not be confused with hybrid seeds or genetically modified seeds produced by international agricultural conglomerates. Some beneficiaries explained that by using the seeds donated by BRACED, their harvest almost doubled and increased from formerly four bags to a current total of seven bags. In addition, some women were able to generate additional income by poultry farming – an activity that was exclusively targeted at women. These increases in income notwithstanding, it should be noted that most beneficiaries still live below or near the poverty line.



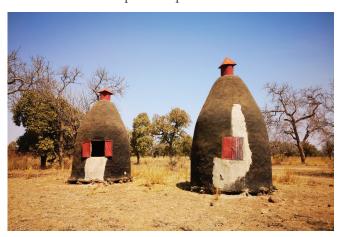
Market sales were also supported by training courses in market-oriented agricultural production and by (sometimes) helping farmers to establish links with potential buyers. In addition, some beneficiaries were able to invest their generated incomes in their own small businesses.

In all villages visited, the beneficiaries indicated that their food security situation as well as their resilience to climate extremes and disasters had improved since the start of the project. This improvement can be traced back to all pillars of food security, i.e. the physical availability of food, the economic and physical access to food, food utilisation and the stability of these three dimensions. The availability of food and the economic access to food increased with the new economic activities carried out by the beneficiaries. Furthermore, food

utilisation, i.e. the improvement of people's nutrition in qualitative terms, was improved by BRACED's different awareness-raising sessions in the communities, including animated video projections and live cooking demonstrations.



Moreover, beneficiaries indicated that BRACED had an impact on the communities' social relationships as well as on gender equality and women's empowerment. For instance, the beneficiaries' organisation in producer groups motivated them to work together. In addition, the joint participation of men and women in the different training courses strengthened the social relationships as well as women's empowerment. Overall, the different project activities contributed to an improvement of the mutual help and support in the villages and created a new spirit of open-mindedness.



Regarding their opportunities for participation, beneficiaries indicated that they were constantly accompanied and supported by BRACED and its local partners. Therefore, they were very satisfied with the activities of the project. They felt that they had been well informed about each step of the project, that they were given the opportunity to express their needs and that their requests were considered.

## **Success factors and challenges**

- ▶ The introduction of the market gardens led to the beneficiaries' occupation throughout the year. In Burkina Faso, this is particularly important given that traditional agriculture is only carried out during the rainy season from May to September. During the dry season, however, farmers usually have hardly any economic activities. Moreover, the usage of the improved seeds enabled farmers to produce higher quantities above the subsistence level, which they could sell on the markets.
- ▶ The participants of the focus group discussions underlined a certain level of social cohesion of the community and strong leader personalities as important factors that contributed to the success of the interventions.



- ▶ BRACED explicitly included women in the project's activities, training courses, workshops and producer organisations. When the establishment of producer groups was initiated, BRACED made a clear condition on the composition of the groups: they should include more women than men. In one of the villages visited, the producer group of a dry season market garden consisted almost exclusively of women. The same condition applied also to the different training courses BRACED provided for the beneficiaries.
- ▶ Supporting some women to carry out poultry farming contributed to further increases of their incomes. However, given that livestock farming is considered to be a traditional activity of men (at least amongst the Mossi of the Central Plateau), this activity also helped to make poultry farming an increasingly accepted women's activity in the villages. While women

expressed the wish to have further awareness-raising measures to make men consider livestock farming as an activity for women that benefits the entire household, most men stated that they have started to realise the positive effects of women's engagement in livestock rearing. Women are able to contribute to the household's income and – above all – the meals prepared taste better now.

▶ Live cooking demonstrations and animated video projections helped beneficiaries to learn the preparation of new dishes using the different vegetables that they started to grow due to BRACED, e.g. cassava.



- ▶ Difficulties during the project implementation occurred above all regarding the timely provision of inputs, the quality of some of the tools and equipment provided, the poor construction of some of the storage facilities and the wells, which in some villages were not dug deep enough and, consequently, dried up during the cropping season.
- ▶ The greatest challenge is posed by the future of the BRACED activities beyond 2019. It is essential to continue the monitoring and evaluation of the current activities in order to ensure that beneficiaries keep up the activities started by BRACED and that, in the long run, BRACED's achieved results are maintained. Furthermore, local extension services only get involved if a project pays the operating costs, particularly the transport costs. Therefore, it is necessary to raise enough funding, something which is currently still in the air due to the Brexit.
- ▶ The recent deterioration of Burkina Faso's security situation is also worrying given that the correlation between poverty and conflicts is well known to be very high and could impair what has been achieved so far.

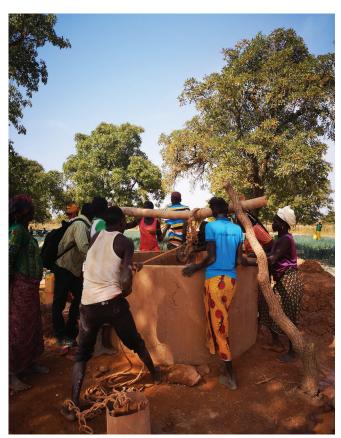
## **General conclusions for development cooperation**

- ▶ This study analysed how the BRACED programme in Burkina Faso has improved people's food security and living conditions by focusing on the beneficiaries' perceptions and evaluations. According to the beneficiaries, BRACED has made important contributions to their food security and economic situation and improved their resilience to climate extremes and disasters.
- ▶ In order to improve people's nutrition in qualitative terms, it is not only necessary to increase their incomes and make food better accessible. Live cooking demonstrations and awareness-raising sessions are important means to help people integrate new foods into their daily nutrition.
- ▶ The social component behind the implementation of projects should not be underestimated. Organising people in producer organisations and including both women and men in training courses can positively affect the social cohesion among community members and increase women's empowerment.



- ▶ The importance of putting women in the centre of development can be confirmed by this study. Women responsibly invest their incomes in those areas that are crucial for food security and development in general.
- ▶ The selection of project beneficiaries, their needs and the individual stages of the project implementation should be always openly and transparently discussed among the community members.
- ▶ These positive effects notwithstanding, it should be noted that the beneficiaries' assessments and evaluations have hardly taken into account the future of the

activities initiated by the project. Sustainability beyond project duration is, however, also an important factor that has to be considered and the programme's impact in the long run remains to be seen. By supporting farmer groups establishing cooperatives with a board and a system of member contributions in place, BRACED sought to lay a solid foundation for farmer groups to continue the activities initiated by the project. Nevertheless, it usually requires some time for cooperatives to be fully operational. Therefore, it would be desirable to continue the support of these farmer groups at this early stage.



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## **Images**

1. Cover: Women working in their market garden (cultivation of onions), 2. Map of the project region (source: cartography by Fabio Pruß), 3. Diagram of intervention areas and activities (source: author's illustration based on an interview with an officer from Welthungerhilfe in Ouagadougou, Burkina Faso, November 2018), 4. Market garden with solar pump, 5. Participants' evaluation of their income situation before the start of the project compared to today (2019), 6. Participatory outcome mapping exercise, 7. Onions cultivated in a market garden, 8. Storage facilities for onions ("arziki"), 9. Producer group in Guela consisting almost exclusively of women, 10. Cassava field, 11. Women and men working together to install a solar pump in their market garden, 12. Producer group deepening a well in order to get water to irrigate their market garden.

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#### **Project characteristics\***

B5 - Intensity of research team involvement

G2 – Gender index

P3 - Participation

A1 – Target group index

\* For explanation see Good Practice Handbook or www.inef-reachthepoorest.de

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#### **INEF - Research Project**

The research project aims to develop recommendations for state development cooperation. The aim is to identify measures that can better reach extremely poor, food-insecure and vulnerable population groups.

We examine the interdependencies of extreme poverty, vulnerability and food insecurity in order to identify both blockages and success factors for development cooperation.

Based on literature analyses and surveys of professional organisations at home and abroad, successfully practised approaches ("good practices") are to be identified and intensively analysed within the framework of field research. In addition to a socio-cultural contextualisation, the gender dimension is consistently taken into account throughout. The local investigations focus on the participation of the affected population in order to capture their perception of the problems and ideas for solutions.

We initially conduct our research in Ethiopia, Benin, Kenya and Cambodia.

The project is funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) under the special initiative "One World - No Hunger".

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