Use instructions of the Mali Cash+ project impact evaluation data

OVERVIEW

This document provides information for using the impact evaluation data collected in the framework of the project ORSO/RAF/502/FIN "Productive safety nets as a tool for reinforce the resilience in the Sahel" implemented in the Nioro Circle in the region of Kayes in Mali from April 2015 to February 2017. The project is commonly referred to as a Cash+ project. The data collection was administered on 1 151 households in October – November 2017, i.e. nine months after the project ended.

The dataset is released by the Food and Agriculture Microdata catalogue. The data package contains 17 modules. In addition to explaining the data structure, this document provides brief information about the project and the evaluation.

THE PROJECT

In order to offer a response to the critical humanitarian situation in the Sahel where around four and a half million people were facing recurrent food insecurity, the FAO's Regional Resilience, Emergency and Rehabilitation Office for West Africa/Sahel (REOWA) implemented the project ORSO/RAF/502/FIN "Productive safety nets as a tool to reinforce the resilience in the Sahel" in Mali and Mauritania from April 2015 to February 2017. The project was funded by the government of Finland. Its overall objective was to strengthen the resilience of households vulnerable to shocks and heavily affected by food insecurity.

In Mali, the project targeted 36 villages in five communes (Nioro, Nioro Tougouné Rangabé, Guétema, Yéréré and Simby) in the Nioro Cercle ("Cercle de Nioro du Sahel") of Kayes, belonging to the western Sahel band where many communes were identified as the most vulnerable to food insecurity. The programme initially targeted 750 households. However, after receiving an extra funding in the end of 2016, the project extended the benefit to 150 additional households. As a result, a total of 900 households were beneficiaries of the programme. They were the vulnerable households considered as "poor" and "very poor" according to a community targeting based on the Household Economy Analysis framework.[1]

Two sets of intervention of equal financial value have been provided to the beneficiaries: i) one called "Cash Only" and ii) another called "Cash+". Half of the households received Cash Only, which is a monetary transfer of XOF 100 000 (about $160). The other half received a transfer of the same value however split into an in-cash transfer of XOF 20 000 (about $32), an in-kind transfer of goats (one male and two or three females) vaccinated and dewormed, and 50 kilograms of animal feed. There was no condition on the use of the transfers. The financial value of the transfers respectively corresponded to 18 and 20 percent of the pre-intervention mean and median annual household expenditure. The transfers received by the 750 initially targeted households and by the 150 additional households are slightly different. The details of the transfers are presented in Table 1.

[1] Save the Children (2008). The Household Economy Approach. A guide for programme planners and policymakers. London, UK.

In each village, all beneficiaries received either Cash Only or Cash+. In other words, no village had both Cash Only and Cash+ beneficiaries. The reception of Cash Only or Cash+ was totally random and independent of the beneficiaries' preference, which increases the reliability of the study design.

Table 1: Project benefits

For the initial 750 beneficiary households		For the additional 150 beneficiary households	
Cash Only	Cash+	Cash Only	Cash+
375 households	375 households	75 households	75 households
• XOF 100 000 (distributed 2 times, i.e. XOF 50 000 each time).	• XOF 20 000; • Goats: one male and two females (vaccinated and dewormed); • 50 kg of animal feed.	• XOF 100 000.	• XOF 20 000; • Goats: one male and three females (vaccinated and dewormed); • 300 kg of animal feed.

Note*:* The programme initially targeted 750 households. Half of these households (i.e. 375 households) received Cash Only and the other half received Cash+. In March and April 2016, 375 Cash+ households received the kit Cash+ in its totality. The amount of XOF 100 000 was distributed in two tranches to the 375 Cash Only households: XOF 50 000 in March/April 2016 and XOF 50 000 in July 2016. After receiving an extra funding in the end of 2016, the project extended the benefit to 150 additional households and distributed all the transfers at once.

In addition to the transfers, the Cash+ beneficiaries received additional training on good breeding practices. Follow-up zootechnical missions including local state technical services were conducted to evaluate the conditions of the distributed livestock.

To improve food intake and raise awareness of the benefits of diversified food consumption, the project provided to both Cash Only and Cash+ beneficiaries trainings on Essential Nutrition Actions, Infant and Young Child Feeding and hygiene practices. Two beneficiary women per village were trained by nutrition experts from the Ministry of Health and FAO. Two subsequent awareness sessions were conducted per village. The project also provided 36 culinary demonstration kits in all targeted villages. Sixteen boxes of soap were distributed to schools, town halls and the project beneficiaries.[2]

The expected result of the project is an increase in resilience of poor and vulnerable households, achieved through improved livelihoods, enhanced food security and improvement of nutritional practices and attitudes.

ABOUT THE SAMPLE AND THE IMPACT EVALUATION

The impact evaluation dataset contains 1 151 households, among which 336 received Cash Only, 344 received Cash+,[3] and 471 non-beneficiary households forming the comparison group. The latter are in neighbouring villages which did not receive the intervention, and they were chosen according to the same criteria for selecting the project's beneficiaries. In total, the impact evaluation dataset covers 58 villages, in which 34 are beneficiary and 25 are comparison villages.[4]

The dataset covers the information on household characteristics, food and non-food expenditures, food insecurity, livestock production, farm and non-farm activities, dietary intake, housing condition, durable assets, decision making, and behavioural characteristics such as risk preference, locus of

[2] Apart from the transfers distributed at the end of the project, the late 150 receivers did not benefit from the supplementary activities, i.e. zootechnical visits and trainings on nutrition and health practices.
[3] In total, 220 beneficiary households are missing in the impact evaluation survey.
[4] There is one village that have both beneficiary and comparison households.

control, hope and aspirations. The main respondents were the household heads or in their absence during the enumerator's visit, other adult members who were the most knowledgeable of the households.

Using this dataset, the impact evaluation study adopts a post-intervention single-difference approach.[5] It distinguishes three treatment arms: households receiving Cash Only (T1), households receiving Cash+ (T2), and non-beneficiary households constituting the comparison/control group (C). This design allows calculating three types of impacts:

- The impact of the cash provided by the project by comparing the outcome for group T1 with the outcome of group C.
- The combined impact of the cash and the livelihood support given by the project, by comparing the outcome of group T2 with the outcome of group C.
- The different impacts of the two types of intervention, by comparing the outcome of group T2 with the outcome of group T1.

Having a non-experimental design, the project did not apply a random process to select its beneficiaries. They were chosen following a specific set of poverty and vulnerability criteria. Therefore, it is important to make sure that the treatment groups and the control groups are comparable. The impact evaluation started with estimating the probabilities of treatment, then applied their inversed values to the regressions in order to predict treatment-specific outcomes.

CONTENT OF THE DATASETS

The data are in French. The questionnaire and user guide can be found in both French and English.

The dataset contains 20 datafiles:

hh_sec_0.dta	Interview details	**hh_sec_8_B.dta**	Subsection 8B: Crop production
hh_sec_1.dta	Roster	**hh_sec_9.dta**	Agricultural inputs
hh_sec_2.dta	Food Insecurity Experience Scale	**hh_sec_10.dta**	Non-farm enterprises
hh_sec_3.dta	Household Food Insecurity Access Scale	**hh_sec_11.dta**	Housing and wealth
hh_sec_4.dta	Minimum Dietary Diversity for Women	**hh_sec_12.dta**	Food consumption
hh_sec_5.dta	Minimum Dietary Diversity for Children	**hh_sec_13.dta**	Non-food consumption
hh_sec_6.dta	Hygiene practices	**hh_sec_14.dta**	Decision-making power
hh_filtre.dta	Filter questions of Sections 7, 8, 9 and 10	**hh_sec_15.dta**	Aspirations and expectations
hh_sec_7.dta	Livestock	**hh_sec_16.dta**	Attitude toward risk
hh_sec_8_A.dta	Subsection 8A: Land holding	**hh_sec_17.dta**	Operational details

[5] Ideally, we could better assess the impact of the project by using in addition the baseline and endline surveys. However, they were conducted for the monitoring purpose only. The project implementers initially had no intention to carry out a proper impact evaluation, i.e. by applying as much as possible the framework of experimental design. Therefore, the baseline and endline surveys used different questionnaire than the impact evaluation survey and did not have any comparison group.

Below you will find some important information for their use:

- The unique household identifier throughout the datasets is given by the field **HHID**.
- The file **hh_sec_0.dta** includes household identification details, such as municipality, village, etc. The type of treatment is given by the field **S0Q3**.
- The names of the villages were anonymised. A unique identifier number was attributed to each village.
- The names of individuals were anonymised.
- GPS information was masked to preserve confidentiality.
- The file **hh_sec_1.dta** includes the basic information concerning the household members (roster). The unique individual identifier is given by the field **MEMID**. Users can also uniquely identify individuals by the pair **HHID MEMID**. For example, to link women's personal information in the roster and information about their diet in Section 4, users could run the following command:
  use hh_sec_4.dta, clear
  match 1:1 HHID MEMID using hh_sec_1.dta
- In the dataset, there are 97 households that do not have household heads. They might have already migrated for a long period of time, therefore, have not been considered for the roster.
- The file **hh_filtre.dta** includes fields that represents household level variables that are included in sections 7, 8, 9 and 10, which logically have a different statistical unit of analysis. For instance, Section 7 provides information on livestock holding and production. It starts with the following filter question **S7Q1** "*Did you or any household member own or herd/rear any livestock/animals in the past 12 months?*", which has household as statistical unit and can be found in the file **hh_filtre.dta**. If the answer is no, the interview continues with Section 8. If yes, a set of questions about livestock holding and production is subsequently asked. This information is set in a matrix form (see questionnaire) and can be found in the file **hh_sec_7.dta**, where the unique identifier is given by the pair **HHID id_espece**.
- Similarly, Section 8 contains both information at household and crop level. The first question **S8Q1** "*Did your household own or cultivate any land in the past 12 months? This includes all plots, owned, shared-out, shared-in, rented-in, rented-out, by the household in the previous 12 months, generally used for crop cultivation, but not kitchen/garden plots, used for vegetables production."* is included in the file **hh_filtre.dta**. If the answer is no, the interview continues with Section 9. If yes, a set of questions about land ownership and crop production is subsequently asked. The two questions about land holding (**S8Q2** "*What is the total area of land owned by the household?*" and **S8Q3** *"What is the value of the land you own if you had to sell it?"*) are at household level. Therefore, they are separately saved in the file **hh_sec_8_A.dta**, where the statistical unit is household. The remaining questions of Section 8 are at crop level and can be found in the file **hh_sec_8_B.dta**, where the unique identifier is **HHID id_culture**.
- The following codes are used throughout the dataset: 1 "Yes", 2 "No", 77 "Other (specify)", 98 "Don't know", 997 or 998 "Not applicable", 999 "Missing value". The values 997 and 998 "Not applicable" usually appear as a result of a filter. For example, question **S1Q7** "*Is [NAME] an orphan?*" is accompanied by this instruction "*Ask this question to members who are less than 18 years old*". Therefore, for individuals aged 18 and above the data will indicate "*Not applicable, age 18+*".

For more information, please visit:

http://www.fao.org/in-action/providing-financial-support-in-mali-kayes-region/en/

http://www.fao.org/3/a-i6544e.pdf