Annex C

Reality Check Approach Midterm Study

NORTHERN GHANA MILLENNIUM VILLAGES IMPACT EVALUATION

Date: **November 2016**

Authors: **Dee Jupp, Tony Dogbe and David Korboe**

Submitted by Itad
In association with:

Results in development

Reality Check Approach: Midterm Study

Northern Ghana Millennium Villages Impact Evaluation

Table of Contents

REALITY CHECK APPROACH: MIDTERM STUDY 2

ACRONYMS AND GLOSSARY 3

EXECUTIVE SUMMARY 5

1 INTRODUCTION 8

2 METHODOLOGY 8

3 FINDINGS PEOPLE'S PERSPECTIVES OF CHANGE 14

4 CONCLUSIONS 47

APPENDIX C1: AREAS FOR CONVERSATIONS 48

APPENDIX C2: LIST OF PEOPLE INTERVIEWED 50

Itad
2016

Acronyms and Glossary

ANC	Antenatal Care
CBO	Community-Based Organisation
CHPS	Community-Based Health Planning and Services (community health posts)
CHW	Community Health Worker
CLTS	Community-Led Total Sanitation
Dawadawa	Also called 'locust bean', pods grow on trees and the seeds are used in soups and stews either directly or as powder as a flavouring
DFID	United Kingdom Department for International Development
FHH	Focal Household
F/HHH	Focal and Host Households
GHS	Ghanaian Cedi
GPS	Global Positioning System
HHH	Host Households
HIV	Human Immunodeficiency Virus
ICT	Information Communication Technology
INGO	International Non-Governmental Organisations
JHS	Junior High School
LEAP	Livelihood Empowerment Against Poverty
Motor King	Motorised tricycles for carrying goods and people
MVP	Millennium Villages Project
NGO	Non-Governmental Organisation
NHIS	National Health Insurance Scheme
OECD	Organisation for Economic Co-operation and Development
PNC	Prenatal Care
PRA	Participatory Rural Appraisal
PTA	Parent Teacher Association
RCA	Reality Check Approach
SADA	Savannah Accelerated Development Authority
Shea Nut	Fruit of the shea tree which is edible but mostly used to extract 'butter' for cosmetics and skin creams
STD	Sexually Transmitted Disease
TBA	Traditional Birth Attendant
TZ	Tuo Zaafi (a cooked very thick porridge of maize and water)

Exchange rate (April 2013, baseline period)

One Ghanaian cedi (1 GHS) = 0.51 US dollar

Exchange rate (May 2015, mid-term period)

One Ghanaian cedi (1 GHS) = 0.23 US dollar

One Ghanaian cedi (1 GHS) = 0.144 pounds sterling

All photographs used in this report have been taken with the verbal consent of those photographed and have been cropped or otherwise edited to remove identifying features which may affect the confidentiality or anonymity of the study participants. Those photos that show faces have the full consent of the photographed party.

Executive summary

This Reality Check Approach (RCA) study is the second of a series of such studies which involve living with people living in poverty for several days and nights in their own homes in selected Millennium Villages Project (MVP) 'treatment' and 'control' villages. The study approach is intended to create the best possible conditions for informal and relaxed interaction, conversations, observation and experience of people's everyday lives. The first study was conducted in April 2013 and this one, which involved staying with the same families as we stayed with in 2013, was completed two years later in May 2015.

This Reality Check Approach Study is part of a suite of qualitative and quantitative methods used by the independent Monitoring Evaluation and Learning Component of the MVP and, as such, is commissioned by the UK Department for International Development (DFID). The intention of this second Reality Check Study is to understand the changes which have occurred since 2013 through the eyes of people themselves and attempt to present these perspectives without filtering or interpretation by the researchers.

Six research teams of three to four researchers stayed with a total of 19 families in six different villages: four MVP 'treatment' villages and two 'control' villages (one near and one far control). Each team member stayed on their own (or with an interpreter) for four nights with the same family they had stayed with in 2013 and spent this time engaging in informal conversations, accompanying family members in their every day activities and helping with chores. Conversations loosely followed the conversation guide developed by the team during its pre-immersion briefing, which covers topics related to the MVP interventions.

Families assessed their own well-being. While 10 of the 19 families felt they were better off than in 2013, none attributed this to MVP support. Well-being was principally correlated with having cash, though for the elderly it also meant more care. Positive changes were largely due to increases in numbers of cash-earning members of the family (mostly migrant workers) or increased family labour for farming for own consumption. Two families had had successful bean harvests in 2014 but these had been a result of their own initiatives. Those families who felt they were worse off attributed this to poor harvests and debt, increasing numbers of dependents or ill health.

A conspicuous change shared in every location was the increasing need for cash, whereas households had been largely cashless in 2013. Cash is needed to purchase seasonings, cooking oil, batteries, phone credit, health insurance, pay school 'levies', agricultural inputs, milling services, electricity installation and for social obligations such as funerals and naming ceremonies and to meet increasing consumer tastes for snacks, alcohol, cosmetics, skin and hair products, phone downloads and fashionable clothes. These needs for cash cannot, people tell us, be met by farming and all families, except two fully dependent households, have diversified their income earning sources with 13 of the 17 other families currently having as many as three or more different sources of cash income.

Public poverty has been addressed to some extent in all the villages, but the two control villages have seen the biggest positive change since 2013; one because of its proximity to an important growing market town and the other due to new development programmes. The significance of community infrastructure changes were only highlighted if families felt they directly benefitted, so some changes to roads, electricity and mobile phone service provision were not seen as relevant. It was felt that priorities were not always addressed with, for example, one 'treatment' village suffering dire water shortages but receiving no help for this.

People are increasingly disillusioned with farming, especially with the unpredictability of the climate (particularly, late rains), high costs of inputs, declining soil fertility and risks. This has led to an increased emphasis on migration out of the village ('*down south*') for waged work as well as aspirations to learn trades or continue with education in order to secure salaried work. Only

those who farm Bambara beans and have had good recent harvests retained any optimism about farming. Even with the increase in agricultural support activities from SADA-MVP, and increasingly others, in the form of demonstration plots, video screenings and other training, people generally did not think that this would lead to much improvement in livelihoods.

People were very happy with the new health clinics and other new health facilities and the fact that these are better staffed both in the 'treatment' and 'control' villages. National Health Insurance Scheme (NHIS) coverage has increased since 2013 but people told us that renewal was a problem as the new biometric cards require people to apply for these in district towns and both transport and delays in getting the cards incur costs. All households have mosquito nets but none used them while we stayed with them. However, there were fewer mosquitoes than the same time of year in 2013 and people said it was due to the drought and the spraying programmes in 2014. More people spoke about a preference for giving birth in the health centres partly because these are now more accessible but also because they think it is better. More mothers were familiar with and were trying to practice exclusive breastfeeding and this was attributed to information from the radio, schools, health workers and NGOs. Poor diets and poor hygiene practices continue although half of our families said they would like to install toilets, not for health reasons but for convenience and a sign that they were developed.

There had been new construction and new equipment provided in all the primary schools in both 'control' and 'treatment' villages but some of these were already in poor condition. Interest in maintenance was only apparent in one school in a 'control' area that had formerly been a community school. In one 'treatment' area school maintenance was achieved through frequent externally led spot checks. There was much duplication of incentive programmes for education with the same children targeted by different programmes while others, who were also considered in need, miss out. These programmes providing uniforms, shoes and school supplies as well as school feeding programmes were not thought to increase enrolment or retain children in school. The basis for school attendance had more to do with whether the child was regarded as the 'school type' or not as well as older children's own decisions to leave school to earn their own cash incomes and be accepted as 'adults'. Corporal punishment and teacher absenteeism are the main reasons for children to be out of school. The research team felt that primary age children attending school were much more excited about school than they had been in 2013 and were keen to share their learning.

New or upgraded roads had been provided in four of the six study villages and in some places this had led to an increase in numbers and use of motorised tricycles which are used to transport both goods and people. People complained that some of the roads have already deteriorated due to use by overladen trucks and tractors, often used by outsiders rather than benefiting the villagers. Mobile phone ownership has increased and people say it is mainly to keep in touch with family members who are migrant workers but also for listening to music and using as torches. Electricity connections are being installed in the four 'treatment' villages but, despite paying for installation of meters, very few villagers have electricity connections, leading to considerable frustration. The security and maintenance of new infrastructure and equipment is weak.

The study raises issues to reflect on, some of which will have greater traction when combined with findings from the other streams of research included in the mid-term evaluation. Some of the underlying assumptions for the MVP, such as their focus on small farms and livestock rearing, are questioned considering people's aspirations to leave farming and their need for reliable cash incomes. Provision of infrastructure and services is questioned as being sufficient to change behaviour and to address some deeply held cultural and traditional practices, some of which may in fact have a good basis for being preserved. There seems to be insufficient attention to context in the design of the MVP interventions and the different effects of the same intervention

in different situations. The 'control' villages have attracted attention from non-MVP development organisations and political patronage and this RCA study indicates that they seem poised to become quite successful as a result.

1 Introduction

This report presents the main findings of the mid-term Reality Check Approach (RCA), which was conducted in April–May 2015 as part of the qualitative element of the Independent Impact Evaluation of the Millennium Villages Project (MVP). The Independent Evaluation has been commissioned by the UK Department for International Development (DFID).

The study was undertaken by a team of 12 Ghanaian researchers under the guidance of the international team leader, who also undertook some field research directly. Three specially trained translators supported the non-Mampruli and Buili speakers. Overall management of the team and logistic arrangements were undertaken by Participatory Development Associates Ltd.

The report summarises the detailed field debriefings gathered at the time of the fieldwork. The findings are intended to provide insights into the attitudes, opinions and behaviours of families living in poverty in the SADA-MVP 'treatment' and non-SADA-MVP 'control' villages selected and are therefore expected to complement the other qualitative research element of the evaluation (participatory rural appraisal (PRA) study) as well as the findings from the quantitative survey. This particular report focuses on the changes which people have experienced since the baseline study was conducted in April 2013. It purposely takes the position of people themselves in looking at change. However, unlike other RCA reports, it also includes extensive observations from researchers spending four days and nights in the villages. This is partly because the researchers were aware of changes since their visit two years prior, which were not necessarily talked about by villagers but which we felt were important to share in this report.

2 Methodology

Reality Check Approach

The Reality Check Approach extends the tradition of listening studies (see Anderson, Brown and Jean 2012[1]) and beneficiary assessments (see Salmen 1998[2] and Shutt and Ruedin 2013[3]) by combining elements of these approaches with researchers actually living with people whose views are being sought, usually those who are directly experiencing poverty. It could be likened to a 'light touch' participant observation. Participant observation involves entering the lives of the subjects of research and both participating in and observing their normal everyday activities and interactions. It usually entails extensive and detailed research into behaviour with a view to understanding peoples' perceptions and their actions over long periods of time. The Reality Check Approach is similar in that it requires participation in everyday life within people's own environments but differs by being comparatively quick and placing more emphasis on informal, relaxed and insightful conversations than on observing behaviour and the complexities of relationships.

Important characteristics of the Reality Check Approach are:

- **Living with** rather than visiting (thereby meeting the family in their own environment, understanding family dynamics and how days and nights are spent);

[1] Anderson, Mary B, Dayna Brown, Isabella Jean. 2012. Time to Listen; Hearing People on the Receiving End of International Aid. Cambridge MA: CDA.

[2] Salmen, Lawrence F. 1998. 'Toward a Listening Bank: Review of Best Practices and Efficacy of beneficiary Assessments' Social Development Papers 23, Washington, World Bank.

[3] Shutt, Cathy and Laurent Ruedin. 2013 SDC How to Note Beneficiary Assessment. Berne, Swiss Agency for Development Cooperation.

- **Having conversations** rather than conducting interviews (there is no note taking thereby putting people at ease and on an equal footing with the outsider);
- **Learning** rather than finding out (suspending judgement, letting people who experience poverty take the lead in defining the agenda and what is important);
- **Centring on the household** and interacting with families rather than users, communities or groups;
- **Being experiential** in that researchers themselves take part in daily activities (collecting water, cooking, cultivation) and accompany household members (to school, to market, to health clinic);
- **Including** all members of households;
- **Using private space** rather than public space for disclosure (an emphasis on normal, ordinary lives);
- **Accepting multiple realities** rather than public consensus (gathering diversity of opinion, including 'smaller voices');
- **Interacting in ordinary daily life** with frontline service providers (accompanying host household members in their interactions with local service providers, meeting service providers, e.g. teachers as they go about their usual routines);
- **Taking a cross-sectoral view**, although each study has a special focus, the enquiry is situated within the context of everyday life rather than simply (and arguably artificially) looking at one aspect of people's lives;
- **Understanding longitudinal change** and how change happens over time.

Relaxed conversation while sifting flour together.

This approach was used as part of the qualitative mix of approaches in the baseline study in April 2013 and this study involved revisiting the same families and staying with them for four nights. The emphasis on informal conversations (see photos) and observation allows for openness and insights into the difference between what people say and what they do.

A few substitutions in researchers had to be made since 2013 as two researchers were unavailable. This was facilitated by former researchers providing thorough briefings to those who would take over their host households. One household was dropped as there had only been a single person living there and there had been limited opportunities to engage with her and her neighbours. Refresher training was provided to all researchers and provided an opportunity for the team to induct four new researchers.

RCA team members engaged all members of the family as well as neighbours (focal households (FHH)) in conversations and accompanied them to fields, market, health visits, water collection and assisted with household chores in order to minimise disruption in their daily routine and to ensure the most relaxed conditions for conversations. The RCA team members also interacted with local power holders (Chiefs, Unit Committee Members, Assembly Members) as well as local service providers (health workers, traditional birth attendants (TBAs), spiritual healers, mill operators, school teachers, religious leaders, shop and market stall owners, community volunteers, PTA Chairs) through informal conversations. In contrast to the study in April 2013, the main emphasis of this study was on understanding change. Areas for conversations were developed collaboratively with the team to reflect this (see Appendix 1).

Researchers help with chores creating an informal context for conversations.

Each RCA team member left behind a selection of household goods (rice, sugar, salt, oil, matches, crayons, torches and batteries) for each family with whom they stayed on leaving as compensation for any costs incurred by hosting the researcher. The timing of this was important so that families did not feel that they were expected to provide better food for the RCA members or that they were being paid for their participation.

In 2013, the members of the team had made advance visits to the villages and through talking with ordinary people (in the market, bars, etc.) identified families who were considered poorer as those the team might try to stay with. These discussions were not mediated through projects, Village Chiefs[4] or others who may have had an interest in the household selection. The families were approached directly by a team member and the concept of spending time with them in order to understand village life and, in particular, how they lived their everyday lives was shared. In particular, emphasis was given to explaining that the outsider wishing to stay should not receive any special treatment as this would distort the 'everyday-ness' of the interaction. People understood that no special food, sleeping arrangements or other special guest arrangements should be made and readily agreed to this. It was also explained that the researcher would spend time just chatting as well as helping with chores. The independent nature of the research team was underscored and appreciated by the families who indicated that this would make it easy to talk with us. Having spent four nights with the families in 2013, it was easy to return in 2015 to the same families. We were accepted as 'old friends' and sharing the photographs taken in 2013 prompted reminiscence and fuelled the initial conversations on changes in their families (births, deaths, marriages, graduations, etc.) that had happened since 2013.

[4] Village Chiefs were met both by the advance team and the team members living in the villages for courtesy purposes in 2013 and 2015. The meetings in 2013 involved clarifying the purpose of trying to understand everyday life and assuring them that not only did we not need special treatment we eschewed it because it would affect our understanding of reality. The Chiefs all understood this and supported us to find our own households and did not intervene during our stays in the villages. Follow-up meetings in 2015 served to remind them of this purpose and all remembered us and understood us to be independent researchers.

Each team member kept their own discrete field diaries – never writing these in front of persons with whom they were conversing. These formed the basis of detailed debriefing sessions held with each sub-team immediately after finishing each round of the study. A final whole team workshop was undertaken for one day to reflect on the findings and identify commonalities and differences across villages and households.

Selection of locations

The six RCA study villages are those which were used in the baseline study (April 2013). These had been selected from a longer list negotiated with SADA-MVP headquarters and in consultation with the research team undertaking the PRA study so that the two studies would not overlap.[5] Two of these six villages were designated 'controls' as determined in 2012 for application of the quantitative survey instruments where MVP interventions would not be directed. Both of these were selected from the list of 'controls' used in the quantitative study: one designated as *'near'*, i.e. close to an MVP location where spill over effects were anticipated and the other selected from the *'far from'* category. The villages are not named in this report in order to protect the identity, anonymity and confidentiality of participants. The controls are not noted in the following table in order to maintain unbiasedness within the research team. Only the team leader and two other members of the team are aware of which locations are controls.

Table 1. Locations of study villages

Village Code	Location	Language	Remoteness	Ethnic Mix
A1	Mamprusi	Mampruli	1-hour drive to nearest town. Poor access to transport except market day noted in 2013 but now better with improved road.	2/3 Muslim, 1/3 Christian. Traditionally Mampruli, but currently mixed with Buili (including mixed marriages). Small population of Fulani (settled 11 years ago).
A3	Mamprusi	Mampruli	4-hour drive or 2.5-hour motorbike/river crossing trip to nearest town.	Mampruli speakers comprising 80% Muslim, 15% traditionalist and 5% Christian. Very small Fulani community on outskirts.
B1	Builsa	Buili	35-minute drive on good road to nearest town but poor access to transport.	All Buili speakers except Fulani (settled 16 years ago). Mix of traditionalists, Muslims and Christians.
B2a	Builsa	Buili	2-hour walk to nearest town.	Buili speakers. Mostly traditionalists with 25% Christians. No Muslims.
B2b	Builsa	Buili	A few minutes from thriving market and good transport access to variety of small towns.	Mostly Builsa comprising traditionalists and some Christians. Few Muslims.
B3	Builsa	Buili	30 minutes from major town with good transport access.	Buili speaking. Mostly traditionalists with a few Muslims and Christians. Two communities of Fulani.

Selection of households

The same households selected in April 2013 were revisited. These households had been selected together with the community to fulfil the following criteria:

- Poorer households;

[5] One location partially overlaps in that the RCA selected a sub-community of a larger community selected by the PRA study. This may provide useful opportunities for triangulation in the two further phases of the evaluation.

- Households with different generations living in the house including, where possible, school-age children;
- Households in each village should be at least 10 minutes' walk from each other;
- Households located at the centre of the village as well as the periphery;
- Households with a number of close neighbours (to enable interaction with them as well).

Full details of how the selection was made can be found in the Baseline Study Report 2013. Four households selected in 2013 did not fulfil the criteria of having multiple generations in the household and so this time while researchers stayed with the original households, they interacted more with neighbouring households with larger and multi-generational families. One of these households, as noted above, was dropped altogether although a researcher did make a courtesy follow-up visit.

Timing

The RCA study was conducted in two parts with two teams as described in the following table.

Table 2. Timing of the RCA study

Dates	Team A	Team B	Team C
30 April–5 May 5	Location A1	Location B1	Location B2a
28 May–2 June	Location A3	Location B3	Location B2b

Each RCA team member spent a minimum of four nights with their host families, returning early on the final morning for a full day debriefing.

Offsetting bias

All research involves a potential for bias in gathering and analysing findings. Specific efforts were made to offset this in the design and conduct of the research. Furthermore, reflexivity was encouraged and prioritised by the team leader from all members of the study team throughout the conduct of the research and the analysis of the findings. The following explains how potential biases were mitigated:

Bias from location: At least three RCA team members stayed in each village, each living with a different family living in poverty. The locations were selected to ensure that one house was at the centre of the village, another was at the periphery and the third was somewhere in between. All homes were at least 10 minutes walking distance from one another so that each team member could maximise the number of unique interactions with community people and avoid duplication with other team members.

Apart from the team leader and one other person, none of the RCA team knows which of the villages are MVP 'treatment' villages and which are 'controls'. The villages are coded for the purposes of the RCA and the research team is still unaware of the 'control/treatment' status of villages and households.

Researcher bias: A minimum of three researchers were allocated to each village but worked independently of each other thereby allowing for some level of confidence in corroboration of data. Each village team underwent a daylong debriefing to review information and findings emerging from each location immediately after completion of the immersion. This enabled a high level of interrogation of the observations, experiences and responses and reduced the possibility of individual researcher bias. Furthermore, following completion of both this and the baseline RCA, validation

workshops were held with the entire RCA team to analyse and confirm the main findings and ensure that both specificity and diversity in the findings were captured along with more generalisable findings.

Evaluation framework bias: Rather than using research questions, which may suffer from normative bias, the RCA team uses a broader thematic checklist of areas of conversation. These are summarised in Appendix 1 and provide the basis for conversation topics but do not prescribe the questions. The RCA team members engage with family members and others at appropriate times on these issues, e.g. while cooking the meal, there may be opportunities to discuss what they usually eat, when and who takes what; accompanying a young mother to the baby monitoring session may provide the opportunity to naturally talk about the frequency of these sessions, what she thinks of them and what she gets out of them. This atheoretical approach to research is core to RCA and provides some advantages, especially in terms of reducing bias that exists from using project lenses and etic[6] perspectives in formulating and posing questions. It contributes to reducing the potential for confirmation bias as it purposely seeks to include multiple perspectives and many stories. It is especially able to explore the elements of evaluation that are highlighted in bold in the following definition of evaluation: **'***positive and* ***negative,*** *intended and* ***unintended,*** *direct and* ***indirect,*** *primary and* ***secondary*** *effects produced by an intervention' (OECD Evaluation).*

Triangulation: An integral part of RCA methodology is the continuous triangulation that ensues. Conversations are held at different times of the day and night allowing unfinished conversations or ambiguous findings to be explored further. Conversations are held with different generations separately and together in order to gather a more complete picture of an issue. Conversations are complemented by direct experience (e.g. the long distance to and wait for health services, accompanying children to school and waiting for teachers to arrive, working in the fields, collecting water, etc.) and observation (e.g. hygiene practices). Cross-checking for understanding is also carried out with neighbours, service providers (e.g. traditional birth attendants, community health workers, school teachers, school cooks) and power holders (traditional and elected authorities). Conversations are at times complemented with visuals (e.g. jointly reviewing baby record books, labels for medicine and agricultural inputs, school books as well as drawing maps of the village, crops, etc.). In the course of four intensive days and nights of interaction on all these different levels, some amount of confidence can be afforded to findings.

Confidentiality, anonymity and continuing non-bias in project activities: The RCA locations are referred to by code only and the RCA team is at pains to ensure that both the report and other documentary evidence, such as photos, does not reveal the locations or details of the host households. Faces of householders and images which reveal the location are either not retained in the photo archive or identities are digitally removed. This is partly to preserve the good research practice of confidentiality but also has the benefit of ensuring that special measures or consideration will be given to these locations or households in the course of the programme.

Study limitations

Schools were on vacation during the first round of the study which meant that we had limited interaction with teachers and were not able to observe and participate in normal school routines.

Replacements for two researchers had to be made as they were unavailable for the study this round. Training was given to the new researchers and briefings based on the field diaries maintained in 2013

[6] Emic and etic are used in ethnographic work. Emic refers to insiders' perspectives while etic refers to outsiders' perspectives. Research is generally etic in that it is the researchers' view on what the study participants say, think or do, thus the RCA aims to take the position of the study participants themselves.

by the former researchers were provided, but some loss of continuity in relationship building was inevitable.

One household had relocated to live with other family members but the researcher was able to stay with this family.

The annual rains were delayed and some of those who return home for planting season had left again for migration for work as they were frustrated by the loss of income. They were therefore not available for conversations. The timing of the study means that the research team has limited first-hand experience of the crop season.

3 Findings people's perspectives of change

The focus of this second RCA study was on 'change' and what people felt had changed for the better or worse or had stayed the same since our previous visit in 2013. Using photographs taken in 2013 as prompts, picking up on previous conversations and sometimes our own observations of change (e.g. the installation of electricity poles, construction of new roads) we were able to have open and frank conversations about how people felt about these changes, both in their private and public spheres.

The first section examines how families themselves have experienced change and their own assessment of family well-being and ill-being as well as their perceived reasons for this change. It then further discusses what people see as significant change in their communities. The subsequent sections follow the same format as used in the 2013 RCA Study Report and examine people's experience end perspectives of the main MVP intervention areas, i.e. agriculture, health, education and infrastructure.

Each section starts with a box summarising the main changes which people shared as a significant. Each concludes with a box that provides some authorial reflections from the preceding section.

- There are nearly equal proportions of study households who felt that they were better off or worse off than two years ago;
- Those feeling 'better off' attribute this mostly to having more income-earning members in the family (especially ones who could migrate for work) and good Bambara bean harvests. These families had acquired some new assets;
- Those feeling 'worse off' attribute this to poor harvests, consequent debt and more dependents (non-working people) in the household;
- Households are fluid in terms of membership, with migration for work having significant effect, including leaving young children with grandparents;
- The increasing need for cash has resulted in all the study families, except those which are fully dependent on others, to have between one and five cash-earning strategies beyond farming (which is mostly undertaken to feed the family and rarely cash earning).

3.1 Overview of change

This section reviews people's views of the changes that have taken place within their family as well as in the community since 2013 and results from multiple conversations over the four days we stayed with them.

Box 1: LEAP social assistance payments easing cash flow

The youngest of three elderly people living together gets LEAP, he says: *'I'm lucky- I was a classmate of the MP'.* He collects 70 GHS each month from the school with a thumbprint. The last time his granddaughter went on his behalf because she worries he spends it only on alcohol. She gave him only 8 GHS. He spent 2 GHS/day while I stayed with them on local gin.

Another HHH grandma in her early seventies gets 48 GHS per month. And in the third HHH in this location, another grandma in her seventies is anticipating receiving it soon. She was invited to a meeting the week we were there but the people did not come.

Field Notes (Treatment village)

The HHH widow living on her own still gets assistance but the brother of the Assembly representative tells us this is a flat rate of 40 GHS. She says she does not get it regularly.

The HHH comprising an elderly blind man and his wife have recently become recipients and their nephew collects the payments for them.

Field Notes (Control village)

The HHH widower has taken a new wife and both have been promised LEAP assistance soon. But another elderly HHH widow relies entirely on gifts sent by her relatives in Fumbisi. The third HHH comprising a man in his seventies who is getting deaf and has a knee problem and his intellectually challenged son also now gets LEAP but at the rate of 25 GHS/month. Others complain about this as they do not think they are as needy as others in the village. Women say the young man (32) *'works harder than a woman'* and not only farms, but goes to the mill for grinding millet, does household chores, helps with plastering (usually done by women) and makes charcoal.

Field Notes (Treatment village)

People's views of their well-being/ill-being

People made clear distinctions between what they see as family or personal change and the changes in their community. Among our 19 host family households, 10 felt they were 'better off' than in 2013, while eight felt that they were 'worse off' and one (Fulani family) remained the same.

Table 3. Households perception of their condition in 2015 compared to 2013

Location	HHH (worse off)	HHH (better off)	HHH (same)
A1	2	2	
A3	1	2	
B1	1	1	1
B2a	1	2	
B2b	3		
B3	-	3	
Total	**8**	**10**	**1**

Table 4. Main reasons given for their change in well-being

Worse off (8 HHH)	Better off (10 HHH)
Ill health (x2 in B2b)	More members of the family earning income (x1 B3, x1 B2a)
Poor harvests and debt (x1 in A1, x1 A3, x1 B1)	Migrant work (x1 A3, x2 A1)
Agricultural land no longer irrigated (x1 B2b)	Successful bean harvests in 2014 (x1 A3, x1 B1)
Loss of members of the family earning income (x1 A1)	Less family members (x1 B3)
More dependents (x1 B2a)	Moved to live with relatives (x1 B3) Carers (for elderly) joined households (x1 B2a)

The two 'better off' families where there were more family members earning explained these differences:

- The eldest son (21) has left Junior High School (grade 1), married and so with two extra hands the family is able to cultivate a further 5 acres;
- Son (32) is in better health (he had mental health issues in 2013) and able to farm.

The three families who indicated that migration for work had contributed to their feeling of being 'better off' noted:

- Three sons (who were in school in 2013) have gone to Kumasi for portering work together with their wives;
- Youngest son (who was unmarried and looking after the farmland in 2013) is now married with a baby and he currently works as a shop assistant in Kumasi;
- Two older girls (about 13 years old) have gone to Accra to wash dishes in a restaurant.

One family (B1) which felt that they were 'worse off' than in 2013 had just made the decision for the mother to join a relative in Accra to sell cooked food so that they could improve their position. Another family (B2b) which is struggling because of the closure of the major irrigation dam has sent their eldest son (28) to Kumasi to porter.

Box 2: Seasonal migration

Typically people leave the village over the dry season (November–March). *'There is nothing to do in the dry season, so better to go south and earn some money'.* As well as contributing much needed cash for everyday consumption, people say they also use this opportunity to buy agricultural inputs, phones and bikes. People go *'down south'* to Kumasi and Accra for '*kayaye'* (portering at markets), security guards, construction and agricultural labour. Those *kayaye*-ing say they sleep on the streets or with relatives and earn about GHS 6 per day. Agricultural workers make about 12 GHS (e.g. on cocoa farms) and construction earns between 15-20 GHS/day. We were told people often work in a labour group, sharing the work and catering for themselves.

Two families (A3 and B1) had had successful Bambara bean harvests in both 2013 and 2014 and the market prices had been very favourable. One family said that this was further supplemented by seasonal migration for agricultural work. The potential of Bambara beans had been highlighted in the 2013 RCA baseline study and especially farmers in location B 1 have exploited this potential. This was a self-initiative which did not have support from SADA-MVP. Another family (A3) which described itself

Motorbikes bought with the profits from the bean harvests in 2013–14.

as 'worse off' than 2013, had been in debt in 2014 and was unable to buy the inputs for growing beans but had plans to cultivate three acres of beans this year.

The other 'worse off' family with an acute burden of debts blames these on the SADA-MVP programme of 2012 where they were provided with inputs but then suffered poor harvests and demands from SADA-MVP staff to repay the subsidised cost of inputs in cash (see section 3.2 for further elaboration on this).

Changes in assets

Most households had changed significantly in terms of numbers of people living in the household permanently as shown in Table 5.

Table 5. Fluid households; changes in composition since 2013

Decrease by						Same number but different mix	Increase by		
-6	-5	-4	-3	-2	-1		1	2	3
Three sons and wives migrant work in Kumasi			Elder two daughters portering in Accra, son migrant	Great grand-children (4 and 9) returned to mother	Grandson left for migrant work	Wife (70s) died but has new wife	New daughter-in-law	Son and pregnant wife returned	Step-daughter and son, grand-daughter (10)
				Son left for gold mine, second wife returned to former husband	Eldest son permanent migrant	Older two girls (13) left for migrant work added, grand-daughter (3) left by migrant mother, new babies	New wife and baby	New baby (2)	Son and pregnant wife returned
					Elder daughter married and left			Two grand-children left by migrant worker	

One family had moved to stay with relatives, abandoning their former house, leaving only two households with the same members as they had in 2013. The table indicates those who have permanently moved for migrant work rather than those who undertake seasonal work, so at any one time the household numbers may inflate or deflate significantly more than suggested by the table. The main reasons for fluid household numbers, other than seasonal migration, are permanent migration, leaving children with their grandparents while parents migrate, moving away for secondary education and marriage.

People shared with us their changes in asset ownership, both positive and negative, but only one family had significantly increased their assets. This family built new rooms with zinc roofs for their sons (anticipating their marriages), acquired a new bike, solar panel, plastic chairs, mobiles and enlarged their livestock (goats, cows and fowl). This is all attributed to their successful Bambara bean harvests in 2013 and 2014. This family resides in a 'control' area.

Four other families had enlarged their houses over the last two years also in anticipation of their sons' marriages. Those who had managed to provide zinc roofs for these new rooms had done so from the sale of Bambara beans or from migrant work incomes. Other new rooms constructed by other families remained thatched. Other families' asset accumulation (solar panels, radios, mobile phones and in one case a television) was mostly due to gifts from migrant worker relatives. Some of these gifts were not in working order because the families could not afford batteries or had not been able to afford electrical connections. Five families had more mobile phones (usually one to two more) than in 2013. Eight families had fewer bikes than before because they had broken and people said repairs and parts were too expensive. Only two families had a new bike, one because of the newly faced problem of collecting water and the other because the new wife brought it with her. The Fulani HHH family (B1) had acquired a new motorbike and the only other HHH family with a motorbike was relieved that they had finally finished making the credit payments. This same family, however, had had their TV and solar panel repossessed as a result of failure to pay credit instalments. Three families had fewer goats than in 2013 and told us they had died of disease. One said that the goats had been from SADA-MVP and had a '*disease before they gave them to me'.* An elderly lady had sold her 'asset transfer' goats, apparently provided by SADA, because she could no longer take care of them.

Eight families had fewer bikes than before because they had broken and repairs are too costly.

A new savings group has started but members say it has nothing to do with the one introduced by SADA, but it is possible that they don't know that it is supported by SADA. They meet every Saturday and deposit GHS 2. They can borrow and repay with 10% interest. They say they would rather borrow this way than from a bank and have debts.

Increasing need for cash

In 2013, our study households were largely cashless with savings invested in small numbers of small livestock which could be sold if cash was required. The need for cash has clearly increased over the past two years with people telling us about the need to buy chilli, salt, 'Maggi[7]', batteries (for torches and radios), soap, cooking oil, sugar and phone credit, which they refer to as *'essentials'.* In addition, some families buy tomato paste, dried fish, alcohol, cigarettes, chewing tobacco and kola nut. As more people migrate for work, people talk about them becoming '*bichobilla',* meaning they have what are regarded as urban tastes such as using toothpaste, skin creams and make-up, hair products, buying fashionable clothes and '*looking nice'*. Children are increasingly demanding money for sweets and biscuits. Schools require cash donations (often referred to by people as '*levies'* since they are mandatory) for various events and resources. Health insurance and the costs associated with getting this are another need for cash (see

[7] Always referred to by the brand name, this is powdered seasoning.

section 3.3). The norm now is to hire tractor services to plough land ready for planting and this requires cash payment. People also talk of the need to buy fertilisers and insecticides which were less used in the past. Few people manually grind cereals now and mill costs are another demand for cash. A relatively new need for cash emerging in the study villages is for installation of electricity and construction of toilets, both promoted by SADA-MVP. People tell us that another changing trend is the increasing expectation to provide cash as well as 'in kind' donations to attend funerals and naming ceremonies. Hosting a funeral incurs considerable cost and these expectations have escalated recently (see Box 3). Reciprocal arrangements for labour, for example, help with house construction, are now compensated for with provision of alcohol and cooked food.

Box 3: The cost of funerals

In one of our HHH, there are 12 straw mats rolled up in an unused room. Each one is the death mat for a relative who has not yet had a formal funeral, because the family cannot afford them. The elderly couple hopes that they will not have to pay for these in their lifetime.

There were several funerals taking place during the study period which involved sacrifices, all night dancing and feeding the performers and relatives. There are two parts: the '*kumka*' ('crying'), which lasts three to four days, and the *'juka'* ('burning'), which last six days and is for fewer mourners. These do not have to take place immediately after each other; the 'juka' may be delayed many years.

With the help of various people in the villages, we worked out an average cost:

Kumka: total GHS 730		**Juka: total GHS 475**	
Goat/sheep (sacrifice)	50	Guinea fowl (6)	120
Local alcohol (pito)	100	Local alcohol (pito)	50
Mat	30	Local gin	60
Millet/maize for TZ	230	Chickens (6)	60
Rice (1/2 bag)	70	Women rituals	50
Goat (to eat)	50	Millet/maize for TZ	115
Local gin (3 gallons)	120	Beans	20
Beans (5 bowls)	40		
Incidentals	40		
Shea butter	10		

Migrant workers returning are said to be 'bichobilla': wearing nice urban clothes, using make-up and skin and hair care products. Those left in the village tell us they have aspirations to be 'bichobilla' too (like this woman, who liked this label).

People told us that average spend on *'ingredients'* by which people mean seasonings and cooking oil per week is between 10–20 GHS per household.

These increasing demands for cash which cannot be met by farming, as most of the produce continues to be for home consumption, impels people to seek alternative cash income-earning opportunities. As a notable change since 2013, all families, with the exception of those who depend on the welfare of relatives, have means for additional cash income earning (see Tables 6 and 7).

There was more evidence of LEAP, a government programme to provide cash welfare assistance and eight of the HHH have a member receiving LEAP or have been promised LEAP soon. The payment amounts and frequency vary and people are not sure of the basis for these variations.

Table 6. Cash sources for families

Cash source	No. of HHH	Comments
Livestock	11	Only if forced to sell, goats, chickens, etc. regarded as easily liquefiable savings. Pig-rearer (A1) will not continue because of complaints from community and a new ban on pig rearing.
Processing	11	This includes charcoal production, cooked food, *dawadawa* processing and shea nut processing.
Migration for work	10	Men and women going 'south' for agricultural labour, portering and food industry-related labour work.
Fishing	5	Fishing in rivers and selling fresh and dried fish.
Cash crops	5	Mostly Bambara beans, ground nuts (two others indicated they would only sell their part of bean harvest if cash was really needed, so these were not cash crop farmers).
Buying and selling	4	Two sell local gin, one sells herbal medicines and another cigarettes and phone credit.
Paid services	2	Crop sprayer (although he says that business is declining as people have their own equipment nowadays), labour (digging wells).
Transport/ mechanic	2	Motor king (motorised tricycle) owner-driver and motorbike apprentice mechanic.
Other	3	Includes selling fruit, hunting, land rent.
Dependents	2	Dependent on relatives for cash.



Cash income earning includes fishing in the river (left), dawadawa powder making (centre) and maize cake selling at breakfast time (right).

All the households except the two dependent households are involved in some form of additional income earning. As Table 7 indicates, 12 HHH have three or more different sources.

Table 7. Numbers of households with multiple cash sources

Number of different cash income sources	1	2	3	4	5
Number of HHH	2	3	7	4	1

Box 4: SADA savings group

There are two women's savings groups in this village started in 2014. The members have dwindled to two-thirds of the original number because members could not keep up with the GHS five cedi/week savings. Loans are provided but only for a month. But women told us that if people did not repay in time there was no way to impose any sanctions. They laughed at the idea. They told us that a woman comes to do spot checks on them from time to time.

Women said it was a useful programme because it covers times when cash is short. They said it is possible to get bigger loans too and one said she had taken GHS 100 for porridge making and had repaid 110 after one month. Others were saving for a year to then be able to *'start trading'*. One said after a year she will take the money and get a '*table in the market'.*

Field Notes (Treatment village)

Reflections on study findings: family well-being

- Well-being seems to be correlated with having cash as there are increasing demands for cash. This in turn depends on having multiple sources of income, especially beyond agriculture. It is also related to the numbers of people in the household who can earn cash and avoidance of debt. LEAP cash transfer for the elderly is regarded as an important contribution to household cash flow. Diversification of cash earning options seem to be what people aspire to;
- Farming is not seen as the way to earn cash but rather for own consumption and, as discussed in the next section, is not something people want to do or aspire for their children to do. What does this mean for investment in small farming?
- Migration for work is an important opportunity to earn larger sums of cash than generally able to be earned locally so they can purchase for agricultural inputs as well as education and health costs, and increasingly for personal healthcare products and fashion. Can this be supported rather than regarded as a forced option?
- Increasing the size of homes costs very little as building materials are locally available (unless zinc is used) and are a way to ensure that the next generation, while moving out for work, will continue to be part of the income base for the main family. Greater understanding of the changing dynamics of fluid family households will be important for future interventions.

Community changes

The two 'control' villages have changed significantly and positively over the past two years. One 'near control', due to its proximity to an important market town and easy access[8] to the district town, has attracted incomers from other towns and the population is also growing as former migrants for work return to build their houses.[9] The early signs of electricity installation has further fuelled speculative land acquisition. Livelihoods are diversifying with more people involved in transport provision (especially motor kings[10]) and petty trade. It can, in many ways, be regarded as experiencing the first signs of urbanisation. One of the 'treatment' villages has also experienced a degree of urbanisation and people are buying land along the improved road for future speculative construction rather than as farmland, and land prices are increasing. The other 'far control' has a new road and has established its own small market, a brand new health centre and a new primary school under construction. Both 'control' villages have noticeably attracted recent support from political parties and development organisations over the last two years and have more than twice as many development organisations working in these locations compared to the numbers of non-SADA-MVP organisations working in 'treatment locations'. Some of the 'treatment' villages have no non-governmental organisations (NGOs) working there at all, whereas they had prior to 2013.

Other infrastructure changes were regarded as significant in the 'treatment' villages but only if directly benefitting the person being chatted to. So, for example, despite the installation of a new mobile phone mast next door to one HHH, they did not mention it as they do not have this brand of mobile phone. Road improvements were not noted if the family rarely used the road. Electricity was not considered significant as few had actually got connections to date. The most significant changes were the two new health centres (one in a 'control' village and one in a 'treatment' village) (see more on this in section 3.3).

As in 2013, following the fieldwork, the RCA team members were asked to rank the villages in terms of poverty (considering accessibility, economic activities, access to education, health, electricity and water facilities and social/political capital). The top ranked for 2015 are well connected politically and close to main towns. A1 has dropped in the ranking mainly because it has less social welfare programmes than the B area. While A3 is currently still ranked lowest, it is understood that it has been identified as a location for special development focus.

[8] Made easier with improvements to the main road and increased public transport availability.
[9] The village is 'home' even when they continue their migrant work lifestyle.
[10] Tamale manufactured motorised tricycles for transporting goods and people.

Table 8. Researchers' poverty ranking of villages

	2013	2015
Least poor	B3	B3
	B2a	B2b
	A1	B1
	B1	A1
	B2b	B2a
Most poor	A3	A3

Table 9. Explanation of our poverty ranking

Village	Roads	Electricity	Market	Education	Health	Agriculture	Other livelihoods	Political connections
B3	New road but very heavy use so potholed	Most have grid connections	As before well linked	New facilities, good maintenance Children progressing to JHS (quite good numbers) but many out of school	New facilities, good access for referral, fully staffed	Harvest okay – able to plant x2 seasons	Local commercial farm labour, fishing petty trade Less need for out migration for work	High. Very well linked
B2b	More local transport	Very few	None in village but markets accessible	New construction in process Community efforts in maintenance good Children progressing to JHS	New equipment, better staffed	Average but not good harvests	Construction work , transport operators, increasing civil servants, petty trade Decreasing need for out migration for work	No resident representation but community agency good Opposition MP very active
B1	New main road	Few	None in village	Some new facilities very poor security and maintenance Large numbers out of school	New facilities, better staffed	Harvests quite good – still have stock (end of year) Good beans harvest	Fishing, local labour on land owned by outsiders Decreasing out migration for work because of	New chief & increased confidence- well connected and active

							success with beans.	
A1	New road but heavy use has led to broken culverts & many potholes	Wired but not connected yet	Small weekly	New facilities, very poor maintenance Children progressing to JHS (low numbers) Improving learning outcomes	New facility, fully staffed	Not emphasised. Very poor yields last 2 yrs	Migration for work increasing , petty trade, other trades increasing	Not well linked. Not proactive leadership
B2a	Good access/good condition because not heavily used	Only solar in few HH	Large market accessible	Maintenance average Children progressing to JHS	No change	Good harvest with stocks at end of year	Charcoal burning, migration for work increasing	Church active, chief is trying but not well connected
A3	Road extended but cut off in rain	Solar street lights only	New small weekly market	New school under construction. Poor teaching attendance and quality	New facility partly staffed Poor maintenance	No programmes Good bean harvests but staple crops affected by lack of cash for inputs, late planting.	migration for work - increasing	Non resident representatives, poor community action Opposition MP active

NB: Notes in brown indicate significant changes since 2013.

Increases in 'active initiatives' by development organisations were also observed by the researchers. Some of these were noted as significant by people themselves. In the 'treatment' villages there were few active INGOs, NGOs or Church organisations but they were significantly more active in the 'control' villages. Similarly, opposition MP action in the 'control' villages was highly visible and incumbent MP action was tangible in the best performing treatment villages.

People in 'treatment' villages generally attribute the changes to 'government' and sometimes mention SADA. Little is known about what SADA actually is and some shared that it is a company (citing the fact it has nurseries in Tamale and hires out tractors). Despite prolific signage in treatment villages, people are not familiar with the term 'MVP' or that foreign aid is involved.

Reflections on study findings: Community change

- These findings suggest that while MVP villages may have attracted some private investment or support (e.g. telephone masts, cleaning services), other development projects seem to be purposely directing their interventions to non-MVP communities. Political patronage, in particular, seems to support these 'left out' villages and it seems NGOs are also targeting these communities. As a result, the team felt that the control communities are poised to do rather well in the near future as investments are being directed to them;
- Where the local economy is primarily reliant on agriculture, people may experience positive or negative change primarily as a result of unpredictable climate, irrespective of whether they reside in an MVP area or not. Those living in communities where there is diversity of cash earning opportunities, irrespective of being an MVP or not, are more likely to indicate that they are better off.

3.2 People's perspectives on changes in agriculture

Summary of changes in agriculture

- People tell us they see no future in farming; people talk about climate unpredictability, high cost of inputs, declining soil fertility and risk. This disenchantment is leading to increased emphasis on migration for work, acquisition of trade skills and education for salaried jobs;
- Only those in areas where Bambara beans have been successfully introduced (own initiative) people are less concerned about farming prospects. But even here, people tell us they would rather their children were educated and able to get more secure work;
- Land cultivatable areas were underestimated in the RCA study in 2013 because people only shared what was actually cultivated, were poor at estimating land size and are now better at this since hiring tractors to help plough and some had previously purposely concealed the land they owned in a hope to qualify for benefits;
- The majority of farmers use tractor services. Those with experience of SADA services say they are fair and plough well, but those with influence and less remote fields get the services first;
- Input costs continue to rise and people adopt alternative strategies such as using weed-killer (which is cheaper) instead of fertiliser (i.e. dealing with the problem of poor yields from a different angle). Inputs are often paid for and/or brought by seasonal migrant workers;
- There is more agricultural extension in villages now than in 2013, with demonstration plots and market day video shows. In addition to SADA, people talk of other agricultural support programmes.;
- Livestock programmes are not generally well received, with people complaining that local vets are not well trained, keeping small livestock is a burden (especially when rains come late) and some of the goats they received were already diseased and many have died and in the process, infecting some of the existing ones.

Through conversations with our families, their neighbours, market traders and tractor drivers as well as observation of family farms and other farming pursuits, the RCA team gathered insights into people's views of agriculture and the changes that have taken place since 2013.

'We pray for rain'

In 2013, people were already talking about problems with climate, but two years later the unpredictability of rain has escalated into recurrent and acute concern in all the study locations. Everyone worried about the particularly late rains this year and even when we were in the area in June[11] significant rain still had not fallen. People who had returned home from seasonal migration in order to prepare the land and plant in March/April were frustrated and many were talking about returning and reducing their losses by planting less acreage and ensuring their income through waged labour '*in the south*'. People were worried that if maize was planted late there would not be an opportunity to plant a second crop (e.g. beans, cowpea). Floods had also taken their toll, especially in some areas in 2014 and people told us that while it was not unusual to experience one flood per year, they had experienced successive flood episodes which washed away consecutive attempts to replant crops.

In all locations except A3, people shared their worries about farming and their hopes that their children would not be farmers. These worries had exacerbated since 2013 mostly because of the recurring pattern of unpredictable rain. A common sentiment was that *'we have nothing else… we*

[11] Usually anticipated in April.

Box 5: Local explanations for the unpredictable rain

'*Cutting trees makes the rain stop early'* (B3)

'*We have stopped giving sacrifices'* (B3)

'*Fulani bring bad luck and sack the rain'* (B3)

'We have more Churches and so the small gods have run into the forest' (B3)

'We need to perform some rituals to bring the rain' (B2b, A3)

'Rains are late because we did not stop funerals in April' (B2b)

'Too much air blowing' (A3)

were born into this… but we want our children to go to school'. One father (B3) said, '*I want my children to be like you'* to one of the researchers. Those in areas where the harvests were particularly poor (A1) were actively encouraging their children to take up trades such as hairdressing, tailoring, mechanic and preferred to send those without a trade to take up portering work (*kayeye*) or work as dish washers or in food preparation outside of the community rather than farming. In B2b where the former success of cash crops at the dam supported by good access roads and INGO technical assistance is over,[12] parents also encouraged the education of their children so they can become security guards, skilled labourers, work in catering and, preferably, hold a salaried job. Children themselves concurred and often shared with us their aspirations to be teachers, nurses and police officers. The only area where people said '*farming is good enough for us'* was A3, an area which is remote, has had very poor schooling and few role models taking up alternative livelihoods. Migration for work here was rare but is increasing and, recently, they have been realising the potential with Bambara bean cultivation so are perhaps more optimistic than others. However, even here, one HHH father said he wanted his children to go to school and '*become big people'*.

Table 10 summarises the very different experiences from different areas with some people in some of the 'MVP treatment' locations faring worst.

Table 10. Winners and losers, farming over the last two years

Location	Good harvests	Bad harvests
A1	No	Very poor maize harvest in 2014, except for those who planted early (better off). Late rains followed by drought. Some had no harvest, some had only 1/3 normal yields.
A3	'*Excellent'* Bambara beans harvest Other crops *'as normal'*	-
B1	Not bad '*as normal*'	Some people flooded three times and harvest reduced by 50%.
B2a	A few had grown Bambara beans successfully	Maize poor because of late rains followed by drought so down by 50%.
B2b	Maize good (people able to buy zinc roofs- obvious observable increase)	Cash crops declined significantly because of closure of dam and poor road access.
B3	Not bad	Poor rice (down by 1/3) because of short period of rain.

[12] Dam closed, road in poor condition and INGO has left.

Box 6: '*We are getting poorer*'

This family harvested almost nothing in 2014; their bean harvest was badly affected by drought and they got hardly one bag. In 2013 this had been an important asset for the three widows who live here with their extended family as they were able to buy their personal items with the sale of beans but this year they said they had to do without. The maize harvest was so bad in 2014 they had to buy from the market for the first time ever. The men of the family shared that they had not recovered from being forced to pay in cash for the fertiliser inputs provided in 2012 because they had not been able to pay 'in kind' i.e. with part produce because the harvest had failed. One man said, *'I now owe six bags worth of crops* (to neighbours) *and so I am really worried'*. He has not secured loans for this year, he knows the tractor will therefore plough late and fertiliser will be applied late. Last year, the son says, they could not use insecticides or fertilisers because they had no money. People who might give loans, they explained, delay their decisions and *'then it is too late'*

Field Notes (Treatment area)

In 2013 we noted that farmers were mostly cultivating five acres or less (although we did query the accuracy of these estimates). We assumed that this represented their land holdings but, in fact, all the households actually have rights to cultivate more land than this as determined and sanctioned by village leaders. Some of the underestimates shared in 2013 were due to poor estimations by the family themselves (with families becoming better these days at providing a more accurate measure of their land cultivation based on charges they incur for tractor ploughing[13]). Some were due to the fact that families choose to farm different size plots from year to year often purposely leaving land fallow because of lack of labour, lack of money for inputs or because they have alternative sources of income. A further reason we realised this round was that some families purposely conceal their land sizes in order to appear more in need of assistance. In 2013 few researchers had actually visited the plots but this time several did and observed larger plots than reported and additional plots further from the village (sometimes some hours walk away). Thirteen families actually have cultivation potential of over five acres (mostly around 10 acres) with two having as much as 15 acres. Six cultivate less than four acres with four, comprising elderly, cultivating small plots near their homes.

Inputs

Unlike in 2013, tractors are now rented by nearly every household to help with preparing the land for planting and only those cultivating very small plots use manual labour. Most of these are private tractor operators but some are from SADA. Where there were SADA tractors available for rent people said these tractor drivers '*plough nicely'* and *'don't cheat you'*[14] like some private tractor operators. People say that the tractor drivers have told them to cut trees and dig out tree roots to make it easier to plough. Some said they were confused by this advice because others had suggested they should preserve trees. The tractor operators like to work on blocks of land at one time which means that farmers have to wait their turn and people feel those with more influence and ready cash get their fields ploughed first. Those with more remote lands often are last to be serviced. The cost of private operators continues to be a little higher than the services offered by SADA. While SADA mostly charges GHS 40/acre[15], other charge GHS 45–

Box 7: Special inclusion

One of our HHH comprises two elderly brothers in their seventies and eighties who live with another brother's widow in her eighties. The elder man still farms a small half acre plot and shared how he is a member of the farmers group and gets help from SADA. He gets a '*bowl and a half of seeds'* (less than others but he says this is because he only cultivates a small plot). They tried out a new kind of bean last year which '*SADA people say kills weeds and can be used for animal food. I have bagful of seeds from last July and am waiting for SADA to tell me what to do next'*. He said he also got maize seeds, tractor services and goats for free from SADA last year and is very happy about all of this. Except the goats were already diseased when he got them and died.

Field Notes (Treatment village)

[13] Which are charged by the 'acre'.
[14] Charge less than most private operators and *'SADA acres are bigger'.*
[15] An increase from 2013 of 30%. Charges in 2013 were said to be GHS 30–32/acre.

60/acre. In one remote village, people talked about the problems getting loans for tractor rental and one FHH head told how he went from door to door asking for a loan but nobody would give him one: *'I don't cry from my eyes but from my heart. Those tears pass through me and enter the ground so nobody sees my sorrows'*, he said. Others spoke about the importance of seasonal migrant work in order to pay for inputs. In areas where experience differed (e.g. A1), it was due to the ability to manage timely inputs paid for by migrant work.

Box 8: Learning outcomes from SADA extension

'There were thirty men (in the group) *originally but seven have left because of the cost of fertilisers, even though they are five Ghana Cedi cheaper than the market. We are shown videos, mostly on market days and during the run up to the rainy season and watch the same ones over and over but like the fact that the man in the film speaks our language* (Builli). *Everyone comes to watch these, even the children. We learned about spacing maize in lines, the need to buy fertiliser, how to store seeds and the need to turn them over the first week and cleaning before storage. The extension officer is a farmer himself and he can really answer our questions'* (HHH mother).

Another said: '*I tried the idea to plant in lines and planted beans in between last year. I was satisfied with this.'*

Field notes (Treatment village)

Some people tell us that they rely on the migrant workers in the house to bring weed killer and fertiliser with them when they return. Those with seasonal agricultural work use the knowledge acquired there to buy wisely and apply the inputs appropriately. People (A3) told us that if money is short they avoid putting fertilisers on and use *'condemn'* instead, which suppresses weeds and is a less costly way to '*harvest what we can'*.[16]

Acres upon acres of dry parched land at the beginning of May. Even one month later there was still no substantial rain and no land preparation for the maize crop.

In control locations, some people talked about SADA extension although in one they complained about promises of seed and tractor support which never materialised and they felt very neglected as a result. In one treatment area, people complained that the extension services provided by SADA were not as good as those provided by Weinco in the past. They say they rarely come and do not explain well. However, in this area there has been a one-acre demonstration plot established where *'white people came and helped to grow maize, millet, three types of soy bean, cotton and moringa'.* People explained that a 22-member group was formed and they worked on this demonstration plot together in 2014 (although one HHH was cross that although they had helped put up the wood stick fence they were not included in the group). The group was enthusiastically anticipating further support this year (2015)

[16] They say they need about GHS 10 worth of weed killer per acre compared with at least double this for fertiliser.

and had been told, *'that we will each have an acre to ourselves to try this* (mixed cropping) *out'* for themselves.

There are new organisations providing technical assistance in agriculture, e.g. USAID, Canadian and Dutch supported. From the experience in B2b of cooperative groups, supported in the recent past by an INGO and another by an international funding agency, these have been unsuccessful as *'group members can't work together and some people take advantage – so we prefer to work individually'.*

Box 9: Unhappy with SADA agricultural extension

An agricultural officer had requested that the village sets up some demonstration plots near the road but people protested that the soil is not good there. *'The officer does not want to walk far'*. My HHH did not want to join because '*they are not serious, they collect dues but do nothing useful with it'*. Others say that you only get help if you are part of a group and otherwise have to pay for help.

Field notes (treatment village)

Reflections on study findings: agriculture

- The disinterest and concern about increasing risks in small-scale farming may question some of the assumptions underlying the MVP agricultural interventions. The high demands for cash are driving people to seek work with guaranteed cash incomes;
- Local initiatives such as growing Bambara beans, local savings groups and local work share schemes appear to work better than some introduced schemes. The reasons for this may provide valuable insights for further programmes;
- The fear of indebtedness is a concern for many of the study families and people prefer to raise their own money for inputs (e.g. through migrant work) or their own savings than take loans.

The proposed plans to rehabilitate storage facilities in village B3 materialised.

Nobody talked about getting any information about market prices, weather or agricultural advice through mobile phones.

Box 10: Legacy of the 2012 SADA loan scheme

In 2012, SADA MVP encouraged farmers to form groups with the intention of providing fertiliser and seeds up front for subsequent repayment 'in kind' with produce. In our 2013 report we noted some of the bad experiences with this, mainly because the promised inputs were late and harvests were consequently poor. People were being harassed to repay in cash during the study period and there was much bitterness. Since then, people told us the harassment escalated and people said *'SADA people came with police to collect the debts'.* It is not clear if the 'police' were genuine but people were scared and ran away, some for several months (some say some have never returned). Wives also left a day later leaving their children behind. The man claimed that the *'bank is chasing me for the money and that is why I have brought the police''.* One HHH says he still owes 224 GHS.

Apparently, they were eventually told in 2013 they can have a second chance but a typical response to this was, *'I never want to see that man again'* (HHH head) and the scheme was not available in 2014.

The stories of extreme harassment have permeated to other areas, some even in different districts, and people tell us that they do not want to participate in such schemes. In one location they laughed in hindsight at the strict request from SADA for repayments saying, '*if you buy something at the market and you drop it, do you go back and ask them to replace it?* (suggesting that SADA should take on the risk not place it back to the farmers).

Field Notes (Treatment village)

Only in one 'treatment' village did we come across an 'anti-bush fire' group. This group said that they formed many years ago through assistance of an INGO and SADA took over in 2013. But since this time, apart from being given new shirts, they have had no wage payments or other inputs.

As noted in 2013, livestock rearing is primarily a means to have savings and is not carried out commercially, except for in the Fulani settlements. There was therefore little discernible change in livestock ownership since 2013, although some told us they had been given goats by SADA-MVP but that this had not been very satisfactory. In one treatment area, we were told that people from SADA came and said they would support *'people who were poor'*. One HHH mother was delighted to be picked and, following a meeting at the primary school, was given two nanny goats but both died within the year. Another recipient family blamed the vaccinator volunteers '*who were not well trained'* for administering faulty vaccines which killed their goats. In another 'treatment' location people were wary of the community vets chosen by SADA as '*they have no training and we would not want them to touch our animals'* and prefer to get the vet from Fumbisi to treat their animals. Others said they don't want to keep goats as '*the Fulani steal them when they run into the forest'*. In another location, another HHH had tried to keep goats but they too died and they said the *'gods have told them they are not lucky'* (even their son tried independently and he discovered that a goat he had bought was sickly so sold it quickly). In one 'control' area and one 'treatment' area goat ownership had increased, largely as a way to make savings from the cash earned from selling beans and migrant work, not through any programme of assistance. An attempt to raise pigs by one HHH ('treatment' location) failed as the village has now banned pigs because of the damage they do (killing fowl and digging up plants).

3.3 People's perspectives on changes in health

Summary of changes in health

- Five of the six villages now have their own functioning health clinics and all facilities are better staffed, including three where midwives have been recalled from retirement. Opening times have extended and most have residential staff for most of the week so that emergencies can be better addressed;
- NHIS has increased but renewal has become problematic as the new biometric cards require people to go to district towns and queues delay receipt for up to three days;
- All households have mosquito nets but were not using them. Very few mosquitoes and less malaria in all locations attributed to long dry season and mosquito spraying programmes;
- Clear shift in preference for institutional births compared to 2013, mostly because of more local provision of delivery suites and midwives;
- More knowledge of exclusive breastfeeding attributed to radio, schools and health worker education as well as NGOs. Remaining scepticism, especially when babies appear to be thirsty;
- Mampruli villages still mostly uninterested in family planning, although proximity of the new services, they say, may change this;
- Poor diets persist and some were worse than in 2013; improved slightly only if the family has migrant workers, lives within access to river fishing or successfully grow beans;
- No study families had toilets, yet half indicated they would like them but for convenience rather than health reasons.

Families discussed new health facilities and their direct or indirect experience of them as well as other changes in healthcare with us. We also visited health facilities and chatted with waiting patients and staff and, in some cases, were able to look around. Access was facilitated by the fact that people already knew us from 2013 and also because they recognised that we were actually living in the village, not evaluating but understanding the context.

As reported in 2013, our study families generally consider that they have good health and few seek medical attention. Now all but one 'treatment' village have their own health facility compared to only three of the six in 2013.[17] Particularly in A1 and A3, which both have brand new facilities, people say

[17] This means that the two controls both have health facilities whereas in 2013 only one had.

they are much more likely to visit the health centres before a condition gets critical whereas the distances to clinics before delayed the decisions to seek formal medical assistance.

Furthermore, there is greater coverage by the NHIS now than apparent in 2013. In villages A1 and A3 there has been a recent drive to renew NHIS subsidised by the former MP (as people in A1 said *'so we will vote for him next time'* and in A3 *'we have been promised electricity and improved water if we vote for him and this* (the NHIS)*, at least cuts our costs'*), which included registration officers visiting the villages. The recent requirement for biometric health cards, however, has proven a barrier to renewal. One HHH (B2a) told us how he had gone to Sandema with the requisite forms filled and cash but the queue there was huge. Since he has a bad leg, he found it impossible to stay long and so returned. Others also talked of the cumbersome new process and had delayed renewal as a result. Some said *'you have to stay overnight in Sandema to get in the queue early'* (B2a) and most said it would take a minimum of two days to get (in B2b, people predicted it would take three days). In B2a most of the cards were issued four years ago in a mass registration process but few have been able to renew. But village B2a is also the only one which still does not have a health facility and many there rely on self-treatment, medicines from drugstores and local healers and herbalists, lessening the perceived need for NHIS. While in B1 most people's NHIS remains valid, they have heard about the problems with getting the new type of card and are worried about the increased costs. Families in B1 asked one representative to renew all their family NHIS cards in Sandema on their behalf but those born in Burkina Faso still cannot avail health insurance. In B3, people are aware of the new biometric cards but since they got them free before consider they should be free again. But they were pleased that a new registration centre has just been opened in Fumbisi which is much easier for them to access than Sandema. Everyone was clear that it would cost them GHS 20 (and said it was GHS five for children and people over 60 years old) but those with larger families, in particular, felt this to be burdensome and so opted to arrange insurance for their children only.

Table 11 summarises the changes that have taken place in health facility provision since 2013 and people's views of these changes.

Table 11. Changes to health facility provision and people's views

Location	2013	2015	People's views
A1	No clinic Nearest one hour away	New clinic on outskirts of village with staff quarters, consulting rooms, dispensary, motor king, staff motorbike, toilets and washrooms, delivery room and two bed-in patients Six staff (including midwife recalled from retirement)	Complete change from 2013 as people now say their first action if ill is to '*go to the hospital for quality drugs*'. They say they are treated well and there is a good supply of drugs. People from other villages are drawn here. Waiting times are not long.
A3	Abandoned construction	New clinic just opened comprising five rooms, new toilets and bathroom, new borehole, motor king and motorbike for staff Two new residential staff	People are very happy about this, especially the provision of local antenatal care and family planning.
B1	One basic room CHPS (better facilities 2 km away)	Expanded to include a delivery room, new borehole, motor king Midwife is residential (recalled from retirement) and covers when other two staff not there (total three staff)	The problem noted in 2013 of irregular stocks of medicine persists. People appreciate that there is someone there six days per week and the resident midwife is seen to have really '*turned the place around*' since the poor service provided in 2013. She never locks the gates of the clinic and people are free to knock on the

			door at any time. People think the service is much quicker than in district hospitals and there are less queues. They desperately want the midwife to stay.
B2a	Nearest health centre two hours walk	No change	Continue to use the health centre in the market when they visit and also medicine kiosks, self-treat and use local herbalists.
B2b	Health centre	New motor king, poly tank (but not functional yet) Three residential staff (including midwife) Access road in worse condition	Better medicine stocks. Continues to be quite a busy health facility. Concern about the state of the access road (especially in rains) as accidents have happened here.
B3	CHPS recently re-opened Three staff	New labour ward and midwife consultation room Electricity connection Manual incubators, touch screen smart phones for data input Better stocked dispensary than in 2013 All new staff (four) (all young except midwife recalled from retirement) and all residential	Continue to have very low numbers. People like the services here and feel happy that it is a 24-hour service (Sundays are emergencies only) and an ambulance from the district is on call. Make house-to-house visits, run market day sessions on family planning, hand washing, etc.

Just opened and the floor of this Health Clinic is already showing serious cracks in the cement.

Mosquito nets

While all 19 study households had mosquito nets none used them during our visits. Like in 2013, people told us that it was too hot and they only them used when mosquitoes became a nuisance. But anyway, this time we did not observe mosquitoes. People said that because it was '*hot and dry*' there were not any this year. However, we also learned that Ashanti Gold, a private gold mining company, and the USAID-backed President's Malaria Initiative, had undertaken extensive mosquito spraying mid-late 2014, visiting all the villages. This may be a contributing factor to the low numbers of mosquitoes this year. The health workers in B2b told us they had seen fewer cases of malaria recently and suggested this was because of the spraying programme, which they said had *'helped a lot'.*

Anyway, some of the mosquito nets which were provided three years ago now have holes. Some have never been unwrapped, especially those which are white. People explained that blue and green nets are preferred because they do not show the dirt so easily and when a mosquito is squashed on them

the blood marks do not show. However, pregnant mothers told us that they expected to get them free from the antenatal clinic in the eighth month of their pregnancy and that they would use them while the baby was small.

Mosquito nets have been put to a variety of uses including: i) protecting young fruit trees; ii) cover for store room thatch roof; iii) pillows; iv) bedding to lie on; v) fishing net; vi) door curtain; vii) as a sun blind.

Maternal health

Antenatal clinics were active in all villages now, irrespective of whether they were control or treatment villages. Pregnancy tests at a cost of GHS five are available and enable the mother to be enrolled in antenatal care (ANC). But many told us they wait until they can physically see pregnancy to avoid paying for the test.

There is a noticeable shift away from using traditional birth attendants to help at delivery, especially as birthing facilities are now available close to home and there are qualified midwives in residence (several having been recalled from retirement). In B2a, a former TBA said, '*I don't think there are any TBAs still working here as everyone prefers the hospitals- the nurses are very kind and after the birth will ask you if you want tea or zunyiam'.*[18] In B3 where there are about four to six deliveries every month, there has been a concerted effort from the health centre to force women to give birth there continuing from our first visit in 2013. Women are threatened and the old TBAs have been physically slapped by health centre staff for helping in deliveries which were too quick for the mother to reach the clinic in time. As a result they refuse to get involved now. In B1 the TBA has been banned from attending any more deliveries but she says it is better because the clinic can identify risks better and can access motor kings or ambulances if needed. The male TBAs in A1 and B2b told us that '*people prefer the health clinics these days'* because they have been frightened by health staff about the complications which may occur. In A1 the TBAs have been told they will get a monetary incentive for women they bring to the clinic.[19] They are concerned about what happens when the midwife is not actually present in the clinic[20] and they still maintain that home visits are better sometimes. Women we spoke with in A1 said that they preferred the idea of giving birth in the new clinic with one telling us, *'I prefer that it is only the nurse and me in the delivery room as there can be no witchcraft that way'*. In A3, where the health clinic has only just opened people still prefer to use one of the three active TBAs as they are trusted and come to the house at any time. The newly posted midwife takes a very different stance compared to those in B3 and B1, saying that she will not stop the TBAs from delivering babies. She knows they have been previously trained and plans to invite them to the clinic

[18] Flour and water.
[19] But the clinic says this is 10 cedi and the TBAs say it is only 5 cedi.
[20] One male TBA said he delivered three babies when she last went home for a break.

to learn further and involve them. The TBAs themselves say that, in time, people will prefer the clinic because it has equipment and experience.

Some health clinics persist in providing incentives for institutional birth, e.g. at B1 and B2a the mothers get soap, mosquito nets and Milo or millet flour water, in B2a they also get baby clothing and GHS 3[21]) but others have stopped this practice and only provide *'tea'* after the birth now.

Various new NGO and donor-supported projects have commenced since 2013, especially in the control villages. In both control villages, motor kings have been donated with the prime objective of providing transport for pregnant women (who are exempted from paying a contribution for this service[22]). In one control village, with the help of a new NGO programme, newly trained volunteers make house-to-house visits to encourage pregnant women to attend ANC, give birth in the health centre and continue with post-natal care (PNC). In one 'control' village, the maternity unit has been completely equipped by an INGO. In 'treatment' villages, most of the changes have been funded by SADA-MVP.

We noticed a small shift towards exclusive breastfeeding in both control and treatment villages. In one control this may be due to the new house visit programme introduced by an NGO. One young HHH mother here told us she knew she should exclusively breastfeed for six months but at four months the baby started to pull at cups she was drinking and eating from, *'so I knew she wanted more'.* Another FHH said she had not exclusively breastfed her previous children but since the recent awareness raising campaigns had decided to follow this advice with her last child (although having had no problems with her previous children she remained sceptical). Women here also said they had given their babies the *'biisim'* (bloody milk), meaning colostrum as instructed at the clinic. In the other control location, which has only just got its own health centre, mothers do not exclusively breastfeed saying, '*we have heard it from the nurses but there is no difference between babies who have water early and those that don't so we don't believe the advice'*. Young mothers here told us that the colostrum is dirty and will give the babies diarrhoea so they express it. In one treatment village the practice of exclusive breastfeeding has been entrenched for a long time before SADA-MVP interventions as confirmed by the nurses. Even though there persist a few pockets of superstition, in this location young girls were very clear about the health advantages of colostrum. In two other treatment villages, there was no apparent change in exclusive breastfeeding practice and little use of colostrum. These (and the control, mentioned above, where the health centre is new) were also the **only** locations where, with the exception of the Fulani children, toddlers with pot bellies were observed by the study teams (see below).

Family Planning

Women in A3 were particularly pleased that since the new health clinic has opened they could now avail family planning locally (if necessary, clandestinely) whereas before they had to get permission from their husbands to travel out of the village. Whereas in 2013, people had little knowledge of different forms of family planning, they now spoke more openly, especially about the injection method, which they specially liked because their husbands need not know about it.[23] Both Mamprusi locations, A1 and A3, have many young mothers and sexual activity, people say, begins very young. In A3 there are no condoms available and people said that this was a good thing otherwise, '*men would be ****ing other people's wives like anything'.* In A1, there are two volunteers who distribute condoms but when our researcher went to get some they had run out. These are mainly used by young men to avoid STDs and HIV rather than to prevent unwanted pregnancies. As noted in the 2013 report both

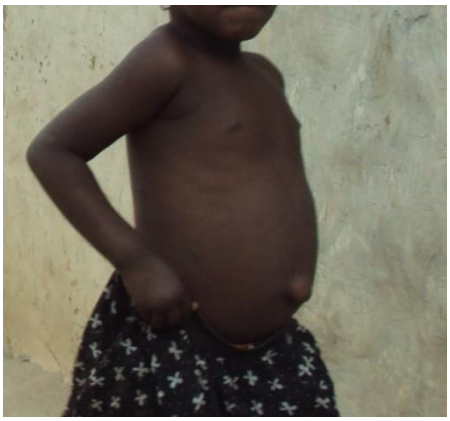
[21] Although some mothers said they did not get these incentives, they still thought the nurses were better.
[22] In one location, children under five and those with snakebites are also exempted but all others have to pay for fuel and driver costs.
[23] Costing 2 cedi/quarter or 5 cedi/year, according to them.

communities have entrenched norms around producing large families and the number of births each week are very high.

In some locations family planning advice is only given after a pregnancy test. Since these cost GHS 5 and kits are often in short supply this has created an impediment to accessing family planning advice. Women said they generally prefer injections and implants as they are long lasting and alleviate the concern that they '*might forget'*. However, peers and nurses often advise that these methods may affect future conception. In one treatment location, nurses do not provide any family planning advice until the woman has had one child. There remains much misunderstanding of family planning and many myths circulate in all locations.

Nutrition

There was little change in the food consumed in the study households since 2013, although some seemed to eat less well than before (consuming flour water only (B2b) and only TZ without beans (A1), and it is significant that these locations had had particularly poor harvests last year). TZ with baobab leaves or other leafy vegetables continues to be the main diet and taken usually twice per day but at random times during the day as before. In a few households this was supplemented with small amounts of ground nut paste, *dawadawa* or beans. Some cook in the evening, others in the morning but generally only once per day and all using firewood. Those with access to rivers eat fish perhaps twice per week. Meat and eggs were hardly eaten, as before.



Pot bellies like this were <u>only</u> seen in A3, A1 (two Mamprusi villages) where it was prevalent and only rarely in B1 (Builsa). In other Builsa locations it was absent.

Our researchers noticed that in the two Mamprusi villages most small toddlers had protruding bellies[24] whereas this was not generally seen in the Builsa locations.[25] Two practices stand out as different in these villages compared to the others: the poor uptake of exclusive breastfeeding practices and fewer or no pigs[26] (to eat faeces).

Water, sanitation and hygiene

[24] Typical of kwashiorkor.
[25] Only seen rarely in B1.
[26] All three villages have a Muslim majority and one has banned pigs altogether this year.

Water is the biggest problem in one of the 'treatment' locations and has worsened since 2013.[27] Despite one new and one rehabilitated borehole it takes up to 30 minutes to lift water and then people have to wait hours in between. One of our HHH slept near the borehole just so she could get in line early in the morning before it ran out. Others have reverted to using the dam or river water. Fulani families here find it particularly difficult as they are driven away during the day and can only collect drinking water from the borehole at night. One of the controls continues to suffer with broken borehole pumps and so collecting water has become a chore requiring a bike to help them transport it, but a new programme is assisting with constructing new dams. At another control location queues for water can take as long as two hours.

In this 'treatment' village water has become the worst problem, where long waits mean some resort to small dug outs (L) and others use bikes to go further to fetch water.

Line of containers in one 'control' village where water pressure is very low.

Hygiene varies from household to household and even where water is short some households try hard to maintain good hygiene by taking daily baths and washing dishes. As noted in 2013, one treatment area has exceptionally good home hygiene practices but these have been practiced for many years and are attributed to a particularly active health worker who made house visits before the SADA-MVP programme began. People say they have heard radio messages and children are applying what they have heard in school hygiene education in a few homes with slight improvements observable by our team. Cooking utensils are often not washed until they are needed again, which means that animals come and lick them. Soap is used in a few houses and conspicuously absent from homes where they said they were worse off now than in 2013.

We observed more people using toothbrushes and toothpaste, especially among the young, compared to 2013. This was mostly as a result, people said, of the influence from people who migrate for work or radio advertising. Others use chew sticks or do nothing. In the one good treatment site mentioned above, nearly everyone uses toothbrushes.

A new Zoomlion waste skip was in place in the market of one treatment location and local people contracted by Zoomlion were working here and at one other treatment location. They said they get

[27] This could have been the result of the reported poor rainfall in 2014 and its delay at the time of the study.

100 cedi per month and are supposed to work daily. But in one location they complained they had not been paid for five months and in another they only worked the evening before market day and following the market day and confined their sweeping and burning trash to this area. People in both locations said that this programme had not really made much difference either in terms of hygiene or providing work.

Trash at the side of the road just in front of the Zoomlion trash skip. Garbage continues to be all over the village as it was in 2013.

None of the study households have installed toilets. The one household (B2b) which had dug a hole in 2013 following advice from their migrant worker son has since abandoned this as the son never sent the promised money to complete it. We asked our HHHs if they wanted toilets and 10 indicated that they did. Their reasons ranged from '*more convenient'* especially at night, in the rain and for the elderly, *'better for guests', 'shows we are developed', 'worry about being seen naked*' and it '*saves time'*. Only one HHH linked it with health ('*because the health volunteer comes all the time and keeps saying so'*). Amongst those who wanted one, people said that it was not a priority, they might do it if they have the money or if it was provided free. Some said that the whole family would not use the toilet as some preferred *'free range'* and *'children find it easier in the bush'*. People were concerned that some which had been constructed earlier had collapsed or became smelly. Others simply saw '*no need'* as there was plenty of space, fields and bush around. Others reminded us that pigs eat it (and it was a good source of food for them). As one HHH (B2a) noted *'we don't' need toilets because we have toilet carriers'* (pointing to the pigs). Our own observations indicated that the common places for defecation were clean (indicating animals had eaten) and that the faeces seen were not diarrhoea.

One control and two treatment villages had active and new toilet construction programmes. The control was funded by an INGO. Both treatment locations were supported by SADA-MVP and people told us these involved digging a pit yourself and then getting subsidised input such as cement, zinc and some skilled labour support. In another treatment village, holes were dug in 2014 but the programme '*people never came back to finish'.* In another treatment location people *'came and told us to dig pits… we did not think there would be costs but when they came back they said we would need ten bags of cement'.* Here nobody has taken the programme up. This was described by the study team as the cleanest village in terms of faecal matter and pigs '*wait as you poo so there is never anything lying around'.*

Reflections on study findings: health

- The stark differences in baby and toddler nutrition status between Mamprusi and Builsa villages may warrant more attention. Similarly, the differences between predominantly Christian and predominantly Muslim communities in terms of hygiene practices and family planning practices suggest that there is more to understand than simply what interventions and health services are being provided;
- Health services provision seems to be currently prioritised by development interventions regardless of whether the village is an MVP treatment or control village and people are using these facilities. We noticed however a potential growing trend within our study families to assume that all ailments have a curative drug solution rather than concern about preventative healthcare;
- Total reliance on institution based midwifery services may have consequences if these cannot be maintained in the future (remembering they are often currently staffed by midwives brought out of retirement who have different motivations (e.g. to serve the communities) and situations than newly trained midwives) and if traditional birth attendants are vilified and not included in the holistic provision of maternal healthcare;
- Does spraying to control mosquitoes have more effect than trying to get people to use nets, especially when nets are hot to sleep under?

Summary of changes in education

- New physical facilities and schools are better staffed in all (treatment and control) study villages. Some new facilities are already in poor condition, including crumbling construction, broken furniture and play equipment.
- Corporal punishment and teacher absenteeism are seen as main reason why children are out of school;
- Boys and girls choose to leave school when they feel they are no longer children and are not achieving anything by staying in school and pursue opportunities to earn cash for themselves and/or leave home;
- Primary school children are more excited about school than in 2013 and keen to share their learning, especially language, counting and drawing skills everywhere except in one control village where teachers are mostly absent;
- Increase in numbers of incentive programmes for girl students since 2013 but boys feel excluded; the programmes duplicate support and do not act as incentives but rather ease costs for those who would otherwise stay on at school;
- Interest in maintenance only apparent in one of the 'control' areas, where the school was formerly a community school. In one 'treatment' new school, maintenance is externally driven through frequent spot checks.

3.4 People's perspectives on changes in education

Conversations about school and school going were undertaken with parents, school-going and non-school-going children as well as a few teachers. These were complemented by accompanying some of our family children to school and experiencing parts of their day, although in the first round of this study this was not possible because of the school holidays. We also played games with children which provided insights into their learning levels and socialisation.

We noted in 2013 that parents were motivated to send their children to school. If anything this motivation has increased especially with further experience of the unpredictability of climate for farming and the disenchantment with agriculture as a future for their children. Nevertheless, there are still many children out of school. In B2a this is explained by the corporal punishment (caning) meted out to children, especially for being late or absent. Children also complained about being caned for lateness at B2b and A1.

Box 11: Fear of caning

'I don't force the child to go to school if they don't like to' said one parent but then we discovered that the children don't go because they are afraid of caning. They tell us they get caned for being late, for '*minor things*'. Teachers come to the house to find them as they know the parents cannot do anything about it. The parents tell the teachers where they are hiding and the teacher then hits them. Some children play truant because of this, leaving home in uniform and coming home at the time school finishes.

Field Notes (Treatment village)

New school buildings have been constructed in all the study villages, although one new school in a 'control' village is still not open to students. Here, there are still chronic problems with staff shortage and teacher absenteeism[28] and the numbers going to school have decreased (nearly double the numbers out of school in 2013). The old school which is still being used is in very poor condition with leaky roofs and no windows. Children tell us they are excited by the new school, which they say will be open by the end of 2015. In the other 'control' village the community school which had closed in 2013 has been reopened for primary class 1-3 with help from the Assembly man and 'common fund' donations of cement from the MP. It now has three new government teachers deployed there.

In 2013, study teams had found it hard to engage primary age children around school topics of conversation and introducing pencils and paper for drawing usually resulted in the children running away. However, there is a marked difference this year which is not attributable to the children being more used to the study team but rather new confidence in holding pencils, writing and drawing. Children in some locations were happy to show off their English and counting skills. Parents also had

[28] The principal rarely comes and the four teachers are often absent although two officially reside at the school.

noticed these changes and some shared they were proud that their children could '*write their names'*. Others added, *'they will not get lost travelling; the old days are gone'* and '*they will understand danger better'.*

Solar powered computer facilities had been provided in several primary and JHS schools. But children say it is hard to learn as there are usually about five children to one computer and *'some never touch the keyboard'.* JHS boys in one village said they preferred the theory classes to the practical because it was there they learned the parts of the computer and the '*things we will be asked in the exam'* (A1). Other JHS students said that, '*there is no work you can do nowadays without computers so these classes are really important'* but said the classes were *'not fun – just get told the parts of the computer'* (B3).

Researchers in different villages found that children were much more ready to engage in drawing than in 2013 when they had often 'run away' when we produced pencils. They played games, participated in counting games and tested out their English and sang songs. We all felt that this was quite different from two years before.

There is an observable increase in girl sponsorship programmes in all the study villages. These include CAMFED, GPEG, GPAS and SADA-MVP with similar targeting criteria (girls who are orphans, with disabilities, from poor homes). Selection of beneficiaries was done at the school, often based on whether they had school uniforms or the state of these. The scheme, we were told, did not extend to those out of school. Each scheme, we were told, provides similar support: school bags, uniform, school shoes, exercise books, pens and pencils. In one area the head teacher explained that he had used his discretion to include some needy boys too. In one treatment village the SADA-MVP programme was described by students as being for needy girls and boys '*as long as you continue to get good grades'*. School bags are sometimes taken by others in the family, shoes might not fit and recipients said, '*you never know what you might get from year to year'*. But one HHH girl shared she was very happy with her new uniform as, '*I used to have to wear a house dress before'* (A1). In one 'treatment' village there has not been a distribution of uniforms since 2013 so students go to school in their own clothes. In another 'treatment' village girls' clubs and 'gender clubs' have been established to encourage continued school going. Here married men were overheard saying to a visitor, '*looking for fun'* that *'all the girls here are serious about school there are no girls to have fun with here. We will have to go to another village to get rude girls'*.

This girl was very pleased with her new uniform as she had to wear her house dress before.

Two tailoring shops in one of the 'treatment' villages had closed since 2013. Both used to train young women in tailoring. However, speculation suggests that they had lost the lucrative uniform making market with the programmes providing them for free and could no longer operate.

This SADA-MVP classroom was opened last year and is already showing signs of very poor maintenance.

Some schools had been provided with playground equipment since 2013 but they were all either broken or in poor state of repair.

Children wait under the tree for school to start – it is already one hour late and only two teachers are present (sitting under the shade at the back). Parents say that teacher absenteeism is so bad 'it is a waste of time sending the children' (control village).

School feeding was not available in the two 'control' village schools but attendance at one school was very good. People said the attendance at the other was poor because the teachers were often absent and it was a '*waste of time'* going. In two 'treatment' villages the school feeding continues to attract younger siblings. Teachers *'hit these on the head and told them not to come'* in one school and, in the other, teachers complain that parents use the school as a '*child care service'* especially in the farming season when they know their children will also be fed. The quality of the food, the children say, is poor and in one 'treatment' village '*the beans have weevils, the banku is not cooked properly and there is not enough'*. But we hear that the caterers here have not been paid for six months. In another 'treatment' village the feeding programme has been restricted to primary school only and is irregular.

The most active Parent Teacher Associations (PTAs) were observed in two schools serving one of the 'control' villages. There may be a history of support because one of the schools was a former Christian mission school but people also indicated that they were active because they did not assume everything would be provided. The other 'control' village claimed that the new school being constructed is as a result of the PTA petitioning the Assembly representative. All three PTAs were observed to be proactive whereas those in the 'treatment' villages seem to be responsive to facilitation by SADA-MVP.

Reflections on findings: education

- Many development programmes target the same children with assets while others, who are also poor, miss out. Although appreciated neither these nor school feeding programmes are seen as preventing drop out or increasing attendance by parents and children alike. Parents talk about some of their children being 'school types' and others not and see little value in pushing the latter especially since they exercise their own agency. Older children who are not 'school types' prefer to leave school to earn their own cash and become 'adults';
- People think schools are too focused on passing exams rather than learning things that may be more useful for their futures, especially learning trades;
- Poor workmanship and poor maintenance of school equipment and facilities may have a significant effect on the long-term value of these infrastructure investments;
- As the example of the successful but small and ill-equipped community school illustrates, motivation to attend school and positive learning outcomes are less to do with the facilities than the quality and commitment of the teachers. While teacher absenteeism and corporal punishment continue in both treatment and control schools, children will continue to choose to remain out of school.

3.5 People's perspectives on changes in community infrastructure

Infrastructure changes in the villages were usually rather obvious and easy to have conversations around but, with the exception of new health centres, were rarely remarked on spontaneously by the villagers themselves. Infrastructure development, especially roads and electricity provision is nearly always attributed generically as 'government'-funded and implemented even where there are signs indicating that the village receives MVP support. Much of our conversations around these developments also involved expression of frustrations at the poor workmanship or the long delays in completion and pleas for us to bring this to the attention of *'big people'* as their attempts to complain had not been responded to.

One of many deep holes made for electricity poles, which have remained like this for more than one year. People say animals have fallen in and died.

One of many broken culverts on the new MVP-SADA road completed in 2014, said to be due to overloaded timber trucks plying the road now.

Roads had been repaired, or in the case of one 'control' village, newly constructed, since 2013. Potholes had been filled and new culverts constructed in Mamprusi and the main road to B2b had now been tarred. The condition of the new road in Mamprusi has already deteriorated particularly as the improvement since 2013 has opened up the road to heavily laden trucks, especially timber trucks. These trucks plough through the villages throughout the night creating noise and churning up dust. Newly constructed culverts have already collapsed due to the weight of these and also, people say, due to poor workmanship. As vehicles are already avoiding

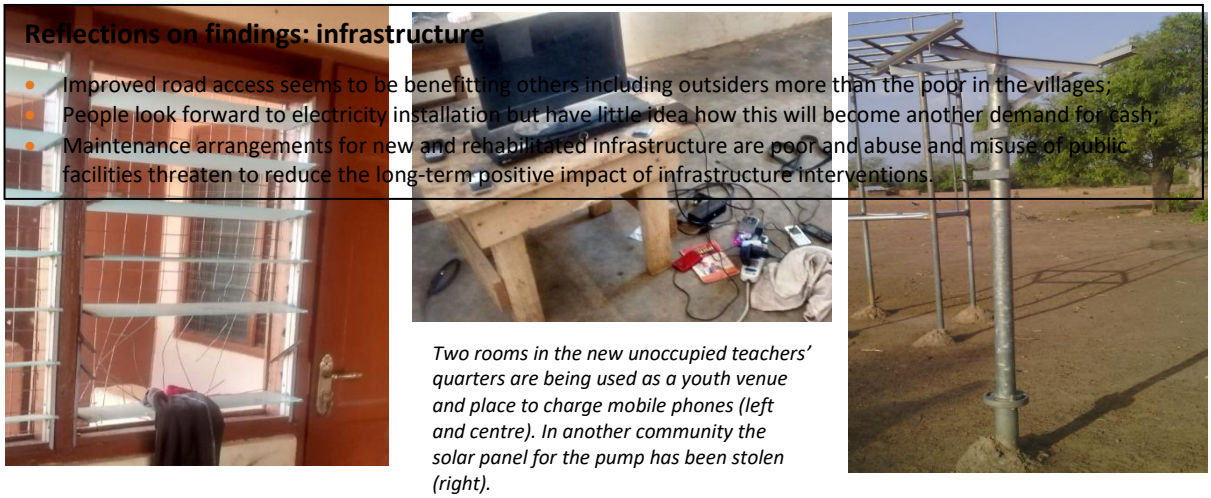
the culverts, the diversions are being ploughed up by truck wheels and people say this will only get worse and possibly impassable in the rains. Despite signs indicating that the road is under the DFID-funded SADA-MVP programme, people were not aware of this and told us they were simply 'government improvements'. In one 'treatment' village in Builsa, people complained that the new road had increased crime, especially cattle rustling.

Electricity

The teams noticed highly visible installation of new electrical poles and some wiring compared to 2013, especially in the four 'treatment' villages, which did not previously have electricity. However, people were frustrated by the slow progress. In one 'treatment' village households had paid for the installation of electric meters and boards[29] in 2014 and over a year later had still no electricity (some still do not have wiring to the house). They do not have a clear idea how much the monthly charges[30] will be and feel they can simply pay when they have the cash. In another 'treatment' village all the wiring to the houses is in place. They are very happy about the prospect of getting electricity and see this as important development, *'what the towns have',* and anticipate owning fridges, *'so we can have chilled water to drink'* or *'to sell'* and students say it will be *'better for doing homework'*. But, like the other village, they have no idea how much monthly charges might be nor are they aware of the regular power outages experienced in towns currently. Some sections of this village have been excluded and have been told they will be in the next phase and feel that as 2016 is election year they will get it by then. In the third 'treatment' village there are poles erected only and no wiring at all yet. They too look forward to it as they can then have electric mills, '*cold drinking water'*, can charge their mobile phones[31] and watch TV.[32] The Fulani families are keen to get electrical connections too, especially for the security of their animals. They have been told that the impermanence of their current houses is a problem for this entitlement so they should build additional houses with zinc roofs. In the fourth 'treatment' village there had been some former connections and now the rest of the village is wired up but not yet connected. They attribute this to the MP and the Assembly representative. Electrical connections have been made to a few houses in one 'control' village and this is viewed as a result of political lobbying and a sign of further electrification to come. New solar street lights had been installed in the 'remote control' village by the Cocoa Board and some households had installed their own solar panels.

Reflections on findings: infrastructure

- Improved road access seems to be benefitting others including outsiders more than the poor in the villages;
- People look forward to electricity installation but have little idea how this will become another demand for cash;
- Maintenance arrangements for new and rehabilitated infrastructure are poor and abuse and misuse of public facilities threaten to reduce the long-term positive impact of infrastructure interventions.



Two rooms in the new unoccupied teachers' quarters are being used as a youth venue and place to charge mobile phones (left and centre). In another community the solar panel for the pump has been stolen (right).

[29] Five GHS/meter and five GHS/board.
[30] Some speculated it might be 3-7 GHS/month.
[31] Which are fast replacing radios for sources of music and entertainment.
[32] Currently they pay 30 pesewas to watch.

4 Conclusions

The RCA study only covers six villages but the depth and triangulation of insights from spending considerable time with families and their neighbours nevertheless can give some credibility to these findings beyond the anecdotal. This report does not benefit from the sharing of these findings with other elements of the mid-term evaluation nor the opportunity to provide an interpretative lens for findings from the quantitative studies. These potentials will be realised following the joint workshop scheduled for September 2015 when the different evaluation and research streams will be able to analyse their pooled findings. The conclusions presented here as well as the reflections presented at the end of each section are intended to inspire further discussion and debate rather than being definitive.

With the exception of conspicuous potential access to electricity in MVP villages, there seems to be little difference between the study control and treatment villages. The fact that the 'controls' were left out of SADA-MVP interventions seems to have led to these being specifically targeted by other development organisations and political patronage (especially from opposition parties) while treatment villages seem to have seen a withdrawal of other development programmes that were formerly active in the villages.

The location of villages in relation to towns and potential work opportunities seems to have more influence on whether the community and families within the community are doing well rather than on whether it is a 'treatment' or 'control' village. Much of the change which has occurred recently is driven by self-initiatives, exposure to outside influences (often through migration for work) and changing aspirations.

Some of the underlying assumptions for the MVP interventions such as a focus on small farming and livestock rearing may not be valid given people's preference for waged and reliable cash earning work resulting from the increasing need for cash.

Ownership and means to maintain and sustain the interventions seems weak and raises concern about the long-term benefits of the MVP investments. The main future challenge seems to be in developing locally embedded processes and behaviours which can sustain and enhance investments and on raising the quality and responsiveness of services to particular contexts and needs. Provision of infrastructure and assets which has been much of the focus of early MVP interventions has led to some changes such as signs of preference for institution-based births and speedier health service seeking behaviours but does not address some of the deeply held traditional and cultural practices which constrain positive change.

Appendix C1: Areas for Conversations (next page)

Your household/family

(mostly observation/experience)

Family tree: changes who lives here/lives away, relationships, ages, pwd, etc., level of education, religion. Main and supplementary ways of making a living/income sources (subsistence and cash).

Sketch aerial diagram of the house: no. of rooms, who stays where, key assets, building materials (photo of house (excluding people)).

Key changing assets: physical: bikes, motorbikes, solar panels, TV, mobiles, agricultural/fishing equipment, etc. Source of change? (gift/credit/profits). Livestock: cows, goats, sheep, chickens. Arrangements for bathing, toilet, collecting water for washing, drinking. Hygiene. Cooking fuel: year round? Light source?

Distance from facilities such as school, market, health centre (walking time).

Power relations in the family.

Financial

Income/expenditure, need for cash. Cash outgoings (regular, periodic/men/women). Changing trends (trend-elec. phone). Debt, savings (savings, GPS), informal financial arrangements (local credit, exchange, mutual support) costs of school, health (including opportunity costs, time).

Aspirations

Dreams for their future, their children's future? Hopes children will do/marry/be. What is good change? What is preventing this change now? What would make a difference to the process and speed of change? Who do they know who has followed dream/changed for better. Process (helping/hindering). Concerns/worries for the future.

Chat, explore, probe, present scenarios 'what if', introduce, debate 'some people think', ' tell me about', listen, draw, explain

Health

Health facilities: changes, rooms, staff quarters, staffing, equipment, operations, medicine stock, diagnostic tests, electricity, ambulance, m-bikes, telecom/e-medicine. NHIS accreditation. People's participation in health facility location, etc.
Behaviour/practice of health providers, user-friendly, exclusion/favouritism. CHW role. Opening hours/functioning. Waiting time.
Maternal health: midwives/TBAs, preferences, experiences. EOC, ANC/PNC (growth books), support groups, breast feeding.
General health: trends, concerns, wellbeing, mortality trends. Role of other health providers. View /use of NHIS.
Prevention: immunisation, malaria, HIV/AIDS, family planning.
Nutrition/hygiene: CLTS, knowledge and practice-process.
Curative: preferences, changed practice, market availability of medicines, self-diagnosis.

Governance

Mapping/change in **CBO**s: function and functioning, membership, trust, training received.
Assemblyman interaction: perception, action/role.
Village leadership: dynamics, trust, effectiveness
NGOs, other organisations in area: role, future?
Dispute resolution, complaints systems, satisfaction, participation.

Infrastructure

Road condition, all-weather passability, changes in transport availability, transport costs, other benefits, maintenance, crime/security, other concerns.
HH access to electricity, costs, energy-saving measures.
Changes in access to water, sources, functioning, usage, restrictions, preferences.
Changes in access to telecom, ICT centres, usage, functioning.

Agriculture and agri-business

Relevance: other sources of livelihoods, migration patterns.
Food crops: trends in productivity, inputs (fertiliser, pesticides, seeds, tractors, labour) costs and subsidies, conditionalities, input timings, crop diversification, credit (availability/ conditions/pay back), effort (roles of men/women). Training, farmers groups, co-operatives, farmer business GPS (membership, functioning, perceptions). AEA relationship, frequency/usefulness of visits/trg. Access to info (mobiles, e.g. climate). Problems (climate, bushfires, price fluctuations).

Livestock: changes, asset transfer program for vulnerable (who gets?, quality and support?), diversification, vet services, feed, health/disease, use of livestock, burden.

Markets: changes, co-operative marketing, links to buyers, prices/conditions, effect on non-co-op farmers, post production, storage. Access to market info (mobiles). Seasonality/demand.

Education

Changing patterns: view/relevance of education.
Teaching/learning: adequacy of school supplies (textbooks, paper, etc.), classroom environment, quality of interaction, effects of teacher training, visual aids, etc.
Infrastructure: classrooms (student:class ratio), furniture & equipment, toilets, water, teachers quarters, elect. ICT. Quality of construction/design. Accessibility, appeal. Effect of change in govt. Use of school premises, maintenance, community contribution, community priority.
Staff: adequacy, capacity, incentives, salary/conditions, turnover, trg and what happens when not there. Teaching support GPS. Absenteeism/contact hours, job motivation. Role of CEW. Relations with students/parents. Supervision frequency/quality.
Incentives/barriers: role models, scholarships, uniforms, school feeding, etc. (who gets/fairness), quality of feeding/community contribution bullying, boredom, punishment, reasons for leaving/timing.
Governance: SMC, PTA membership functioning, role.

Appendix C2: List of people interviewed

People	Male	Female
HHH adults	34	35
HHH children	15	26
FHH adults	74	50
FHH children	40	57
Religious leaders	4	
Savings group members		85
Lead farmers	2	2
School children (in addition to HHH/FHHH)	34	39
Parent teacher association members	5	2
Nurses	10	4
TBAs	6	3
Chiefs	4	0
Shopkeepers	1	8
Transport providers	5	0
Mechanics	6	0
Others	8	6
Total	**248**	**317**