Endline Reality Check Approach
DFID

MILLENNIUM VILLAGES EVALUATION: ENDLINE REALITY CHECK APPROACH 2017

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Results in development

Participatory Development Associates Ltd.

Endline Reality Check Approach

Millennium Villages Evaluation: Endline Reality Check Approach 2017

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Acknowledgements

The Reality Check Approach study was made possible by the work of an enthusiastic team as well as the commitment and support of many. The Reality Check Approach (RCA) was originally an initiative of the Swedish Embassy in Bangladesh where it was first commissioned in 2007 and has since been adopted in eight other countries and other contexts. The study was undertaken by a team of Ghanaian researchers (see Annex 1) with technical guidance from the international RCA Technical Advisor. The dedication of the team members in taking part in this study over the last four years and carrying out their work with professionalism, motivation and respect for the communities in which they stayed, is much appreciated.

Most importantly, this study was only possible thanks to the many families, neighbours and communities who welcomed our researchers yet again into their homes and shared their lives with them for a short while. We are grateful to them for this opportunity, and for their openness and willingness to share their day to day lives, perspectives and aspirations. We hope that the report reflects well their views and experiences and helps to make future programmes implemented in their name relevant and meaningful for them.

Acronyms and glossary

ANC	Antenatal Care
CBO	Community-Based Organisation
CEW	Community Education Worker
CHPS	Community-Based Health Planning and Services (local reference to the lowest level of health clinic)
CHV	Community Health Volunteer
CHW	Community Health Worker
CLTS	Community-Led Total Sanitation
DFID	United Kingdom Department for International Development
GHS	Ghanaian Cedi
(H)HH	(Host) Household
ICT	Information and Communication Technology
INGO	International Non-Governmental Organisation
IRS	Indoor Residual Spraying (mosquito control program)
IWAD	Integrated Water and Agricultural Development Ghana Ltd
JHS	Junior High School
KG	Kindergarten
LEAP	Livelihood Empowerment Against Poverty
Motorking	Motorised tricycles for carrying goods and people
MP	Member of Parliament
MVP	Millennium Villages Project
NDC	National Democratic Congress (current opposition party)
NGO	Non-Governmental Organisation
NHIS	National Health Insurance Scheme
PNC	Post-Natal Care
PRA	Participatory Rural Appraisal
PTA	Parent Teachers Association
RCA	Reality Check Approach
SADA	Savannah Accelerated Development Authority
Shea nut	Fruit of the shea tree, mostly used to make shea butter for cooking and an ingredient of skin creams
SHS	Senior High School
TBA	Traditional Birth Attendant
USAID	United States Agency for International Development
VSLA	Village Savings and Loans Associations

Exchange rate (July 2017 endline period)

1 US Dollar = GHS 4.45 (Ghanaian Cedi)

1 Pound Sterling = GHS 5.70 (Ghanaian Cedi)

1. Summary

The endline Reality Check Approach (RCA) was conducted as the last of the monitoring and evaluation elements of the Independent Impact Evaluation of the Millennium Villages Project (MVP) commissioned by the UK Department for International Development (DFID). It was undertaken in July 2017, six months after the MVP closed. This was the third round of RCA study (baseline conducted in February/March 2013 and midline in May 2015). This particular report focuses on the changes which people have experienced since the midline study was conducted in May 2015 and the overall changes experienced since the start of the MVP. It purposely **takes the position of people themselves** in looking at change and complements this with first hand observations and experience of the researchers from spending four days and nights living with families in the villages.

Six villages were selected in 2013 from the long list negotiated with MVP[1] and in consultation with the research team undertaking the Participatory Rural Appraisal (PRA) study so that the two studies would not overlap. Two villages were selected from the list of comparison villages (without MVP interventions): one designated as *'near,'* i.e. close to MVP locations and where spill-over effects might be anticipated, and the other was selected from the *'far from'* category. This report is the first time the distinctions have been highlighted. A total of 18 households (106 people) were the main focus of the study, all of them poorer households, but conversations were also undertaken and insights gathered from a further 543 people in the wider community.

People were asked about the most significant changes that had happened in their lives over the last four and half years. There are **three key changes** which people noted as significant: (i) electricity connection; (ii) cowpeas cultivation; (iii) increased mobility and connectivity.

The most talked about change this year was **the household connection to mains electricity in four of the six villages**. One comparison (A3 *'far'*) and one project (B1) village still do not have mains electricity. People felt connection to electricity to be a **major sign of development**; they enjoyed light at night, better milling facilities and cold drinks from shops but, without doubt, the most significant change was **access to TV.** However, many shared they struggle with the **additional costs of electricity consumption** and were fearing disconnection as a result of failure to pay their bills, something they thought they would feel acutely after becoming accustomed to lights and TV. Whether they were conservative in their use of electricity or not, the costs of connection (GHS 40–120), electricity consumption (minimum GHS 2–15/month) and the need for bulbs (GHS 2.5 each which last about a month) were considered major additional cash expenses. People talked about a strong link between being able to retain live-in teachers and nurses when their accommodation was supplied with electricity. Electric driven mills have been established and are regarded as better and more efficient.

The main reason those who felt better off financially gave was the **cultivation of cowpeas**. This practice has grown phenomenally since 2013 and people tell us this has **not been directly driven by any external development programmes** but by farmer to farmer sharing and easier access to agro-chemicals. The MVP interventions have indirectly encouraged this practice as their efforts to increase maize production led to an opportunity for double cropping. The earlier harvesting of maize (compared to traditionally grown millet) means that cowpeas can be sown in September/October and are harvested in December/January (i.e. over the dry season) and some suggested that this has reduced the need for seasonal migration for work. Farmers in comparison villages have quickly caught up with the practice of maize and cowpea cultivation, seemingly lagging behind early adopters by a single season. However, we observed a downside to this incredible increase in cowpea production which largely gets swept aside by farmers: '*We know we are using too much chemicals- that's why we don't eat the cowpeas ourselves.'*

[1] Full details of selection provided in the Endline Synthesis Report, 2017.

The third most significant change was **increased mobility and connectivity.** Although roads have largely deteriorated since 2015, there is noticeable **increase in motorcycles and *motorkings* plying** them in both project and comparison villages. Motorbikes and motorkings are better forms of transport for poor roads than the traditional market trucks. The number of bicycles has also increased and people shared that they are a priority purchase for those returning with cash from seasonal migration. Markets are mostly more vibrant (although some smaller ones have shrunk as a result of growth of major markets and easier transport). **Mobile phone ownership and use has increased** but only in two of the villages was Tigo (MVP former partner) cited as the preferred network. Especially significant for people was having a good MTN Ghana service which enabled access to mobile money in two comparison and two project villages. Despite purposively choosing to stay with poorer households, nearly all had mobile phones and most families we stayed with had more than one phone.

People generally conflated their **family wellbeing with economic wellbeing,** especially **having cash to spend**. As noted in the midline RCA, there is an increasing need for cash. In addition to expenditures on education, food and social obligations such as funerals and naming ceremonies, people shared that they were now having to spend on **electricity consumption** since connections have been made, **fuel for motorbikes** which are more widely owned, **hiring tractors** and **agro-chemicals.** There also seemed to be some evidence of increased expenditure to buy medicines. Expenditures on funerals continues to rise and be of concern to families.

Improved wellbeing was also linked to electricity connection, increased mobility and connectivity through mobile phones as well as **public service provision, especially health services**. People noted in particular being able to access painkillers and medicines for common ailments as a key element of wellbeing. **Political patronage** was noted as important and those communities with strong family connections to particular Members of Parliament felt well placed for attention and future development programmes.

Health centre construction and renovation took place in **both project and comparison villages.** In three of the four project villages this was funded by MVP. In the fourth project village and the two comparisons, the work was financed by Members of Parliament (MPs) (incumbent or during the election periods). In all areas, **these improvements have been welcomed** and people say they have, on the whole, made a difference. However, with the availability of these health services some people shared that people more readily take medicines *'even for minor things.'* In one project village, the renovated health facility seems poorly thought through as its proximity to the main town means it is very little used and maintains a service with seven staff but sees only a handful of patients per week. During our stay there had not been a birth at the maternity unit in several weeks. The free ambulance/motorking service provided by MVP for emergencies and referrals in the project villages have all broken down. Similar provision by NGOs in the comparison villages are still operating. However, alternatives in project villages and NGO services have to be paid for and people say there has been a decline in use of these services as a result.

Community Health Workers (CHWs) were regarded by MVP as a cornerstone of their community health programme and resourced them through monthly stipends, provision of phones, bikes and medical testing kits and supplies. CHWs are present in both project and comparison villages (between four and six in every village irrespective of whether it is a project or comparison village). People do not spontaneously mention them as a significant village resource and regular home visits do not actually seem to have happened consistently, despite this being an intention in project villages. Nevertheless, CHWs have been at the frontline of promoting public health messages and some individuals have been exceptional. It seems they become active only when different programmes call on them for example to distribute bednets, to attend training programmes and to support public health outreach activities, including immunisation rather than making regular house calls. Some in project villages have stopped

working since withdrawal of the stipend but others who consider this a social service continue in both project and comparison villages.

CHWs were supposed to encourage uptake of the National Health Insurance Scheme (NHIS). However, since the initial provision of free **NHIS renewals have declined** (only four of the households we lived with have maintained this). Some people noted that CHWs in both project and comparison villages had been **active in sharing information about the link between mosquitoes and malaria** and we also noted that people were more likely to make the connection when chatting than they had in 2013 when mosquitoes were really only talked about in terms of '*being a nuisance.'* Both people and health service providers said that **the incidence of malaria has decreased** but attributed this to Indoor Residual Spraying (IRS) programmes rather than bednet use (promoted by CHWs), especially as few consistently use bednets even though all households had them. There is **no evidence to suggest that a community-led total sanitation approach** (a behaviour change driven approach mandated by the Government of Ghana) **was used to encourage people to construct and use toilets**. Large numbers of toilets had been hastily constructed in project areas in 2016 and many have collapsed already. People talked about being '*told to build toilets'* often accompanied by threats that they would not benefit from future programmes if they did not comply. Only two of our twelve families (project areas) use their new toilets and this is only for adult defaecation. We observed only a handful of people using their toilets at all across all of the four project locations and never all members of a family. Similarly, we observed and were told that **new school toilets and hand washing facilities (if present) are not used.**

Staying in communities later in the year than we have done in 2013 and 2015, we found no water shortage problems because aquifers are less depleted and people are also able to use rainwater collected in small tanks or basins off zinc roofs for bathing and washing dishes. **One project village continues to suffer severe water shortages** in the dry season; of the two MVP constructed boreholes one is shunned because '*it is smelly'* and we noted long queues and people reverting to using dam and river water in the dry season suggesting the provision is insufficient. Nobody boils water and there was no evidence of any water use education conducted by CHWs. Despite the partnership with Zoomlion to tackle waste disposal in project villages **rubbish is still mostly dumped randomly** in ditches beside houses and farmland and includes hazardous items such as empty weed killer and insecticide containers. Zoomlion workers' vehicles are broken and containers for waste at markets have been largely removed. Grey water from homes is contaminated by urine and may be contaminated by faeces and over the years disposal has become more problematic with most houses having stagnant pools beside the house. There is no evidence that CHWs address this problem.

Nobody indicated that family planning education happened through home visits by CHWs as intended. Rather, family planning knowledge, people say, has improved by word of mouth, radio messages and advice from midwives immediately after birth before they are discharged from the maternity units. There was no discernible difference between project and comparison villages. Some women and men were more open to talk about family planning and those who used contraception cited the high costs of raising children as a key driver for their decision. People in one of the comparison villages were the most open to discuss and claimed to use family planning, which is credited to a strong NGO outreach programme. Family planning uptake is extremely challenging in conservative Muslim families where the number of children is dependent on 'God's will' and it is considered important to provide one's husband with many children. **The provision of local health centres has enabled women to seek family planning clandestinely**.

Attendance at antenatal care (ANC) sessions has become a norm in five of the study locations '*otherwise the nurses shout at us and won't let us give birth at the health centre.'* Women are often absent during this period in the 'far comparison' having migrated south for work. Despite increased attendance few were able to recall much from these sessions. **Institution based births have also become the norm** except in the 'far comparison' village where use of male traditional birth attendants

(TBAs) is still preferred (also because they haven't attended ANC and, on this basis, local midwives refuse to help them). In other areas mothers told us they liked that the Community-Based Health Planning and Services (CHPS) gave them 'drips,' provided vaccinations to their new-borns, were able to register their births and get NHIS and '*they check you well afterwards.'* It is also clear that the ban on TBAs and threats to mothers that they will not be helped if anything goes wrong if they try to give birth at home are strong motivators for institutional births. More mothers **knew the message of exclusive breastfeeding** and the practice of institutional births means that nurses do not discharge mothers until they have breastfed at least once thereby guaranteeing colostrum provision. However people shared that adhering to this for six months is still problematic. Attendance at post-natal care (PNC) sessions has also improved and many continue with these until the baby is two years old in all but the '*far comparison'* where the usual practice is to resume migrant work when the baby is 9–12 months. Like ANC, recall from these sessions is minimal. We observed **no progress in baby hygiene over the four years of the study**. Babies' faeces were disposed of beside the house usually without mothers washing their hands. Babies and toddlers used dirty mugs to drink from, played with animal faeces and ate soil, sand and caterpillars. This further implies that CHWs did not make regular home visits but rather were only active on specific programmes (e.g. bednet distribution, toilet construction).

Generally, we found people we met **did not attribute much positive change in agriculture to the project** with the exception of the **tractor programme, which was very much appreciated** by those who benefitted and was often brought up in conversation as something they now miss. People appreciated the project's **fixed price per acre policy** and found project tractor drivers were **trustworthy**. Many said they learned how much land they really had after they paid for tractor services and appreciated that they could defer payment until harvest time. Since the programme has closed, the costs of tractor services per acre have increased, large landowners are prioritised, there is now a shortage of bullocks to plough in many communities and many complained that they were very late sowing this year as a result and others have resorted to using large quantities of weed killer to prepare their fields. Other agricultural project interventions, according to people, *'failed'* or were so small with small target populations that they did not know about them even when, for example, we pointed out signage indicating there had been a MVP intervention.

There has been a huge **increase in intensive use of agro-chemicals** which, farmers say, cut labour costs and increase yields driven by word of mouth and direct experience as well as the quick response to the growing demand by retail outlets for agro-chemicals. None of this activity, according to farmers we met, is due to extension or demonstration programmes. There was almost **no evidence of training on safe usage of agro-chemicals.**

There was **no talk of any working agricultural loan or insurance programmes** in any village (despite probing). Farmers (poorer) we met **did not belong to farmer groups** and many shared they actively eschew these as they regard them as **time wasting and feel they cannot trust those in charge**. Our conversations suggest people prefer to work as family units and make their own decisions rather than being bound to rules and regulations of the group. A women's co-operative established by MVP has been reduced to a savings group (which the remaining women members appreciate) but is not effective in collective bargaining as intended. Other savings groups (Village Savings and Loans Associations) facilitated by MVP have had varying success. Always referred to as *'susu'* some women we chatted with noted their **membership in *'susu'* groups as a key change for them** in the last few years some continue to thrive after withdrawal of MVP support because '*we find it difficult to save on our own'* and appreciate the opportunity to borrow small amounts with very little interest. Others have collapsed mainly because of weak leadership and poor literacy skills. Members shared that these savings are more likely to be used for health, education and funeral costs than agricultural inputs (as intended).

Following commissioned reviews of value-chains, MVP identified mango, maize, millet and acacia as promising new crops and farmers were given saplings and training to grow them. Researchers observed that nearly all the **mango saplings** that had been planted by MVP in project villages they lived in had **died**. The efforts to **increase maize production were severely impacted by the mishandling of the programme at the start** of MVP programme although there has been a move to grow maize in all areas (project and comparison). People told us they **do not want to grow millet** anymore because it is a relatively labour-intensive crop, especially close to harvest time where birds are a major problem. Furthermore, it inhibited the opportunity to grow the more profitable cowpeas as it has a longer season than maize. We came across one acacia plantation in a project village that has been abandoned as '*people did not take care of the young trees and they died without water.'*

None of the farming families we met used improved warehouse facilities and shared that they prefer to keep their crops at home. This is because they do not trust collective storage and worry that their crops will be taken or adulterated. It is also because they prefer to be able to dip into their own home stored stocks when needed, sometimes in small amounts, for emergencies, for obligatory contributions to social events (weddings, funerals), for their own consumption and feeding relatives who visit and prefer the convenience of anytime access.

Small livestock numbers have increased in project and comparison locations in the last two years, especially goats. People told us that buying these small ruminants was a form of savings '*for emergencies.'* Many with Fulani living nearby entrusted the care of these animals to them and in the absence of vet services asked their advice when animals were ill. This significant change in small livestock ownership was **not attributed to any outside programme or change in markets** but rather, families shared, reflects an increase in disposable income mostly from cowpea cultivation. There was occasional mention of MVP livestock transfer programmes but accompanied by complaints that the animals died or were too difficult for recipients to look after.

Improved agricultural productivity through MVP was assumed would have an impact on seasonal migration. In all study locations, except the 'far comparison,' people talked about **a reduction in seasonal migration** (especially among men) but **did not attribute this to the project,** rather to the rise in cowpea cultivation in the traditional dry season (or in the case of one comparison the rehabilitation of a dam which enables them to grow vegetables).

Provision of rehabilitated and new classrooms has **eased overcrowding** in classrooms but the poor workmanship is cause for concern. While provision of accommodation for teachers by MVP has helped **retain teachers and decrease absenteeism**, if the accommodation lacks electricity or the school is close to a main town, teachers refuse to live there and **lateness and absenteeism remains a problem.** For the first time over the four and a half years of the study we felt that **parents and youths were more ambivalent about education** this year. Before, people saw a future in getting at least one child well educated but some shared that there were better opportunities to earn in the village than there had been before, especially in villages experiencing good cowpea production or near the newly rehabilitated dam. High senior high school (SHS) costs were demotivating. A range of other issues has contributed to the **general demotivation in school-going**: **continuing corporal punishment** (in all locations except one comparison), demeaning demands of teachers like doing chores for them, **short teacher-student contact time** (school days start late, finish early and have excessively long breaks during the day), **newly posted teachers cannot speak local languages** and students cannot follow lessons in English and **class size rationalisation**. This latter was attributed to MVP not meeting its class size targets and moving old for age students into higher class irrespective of competence levels. Teachers and students shared that this has demotivated many less able students and increased drop out. The numerous school incentive programmes[2] such as distribution of uniforms, bags, shoes and

[2] Reported in the midline RCA report included CAMFED, GPEG, GPAS as well as MVP.

exercise books, including those undertaken by MVP, have mostly stopped. Rarely did parents of students suggest that this could be a problem. School feeding provides a useful function for families especially during busy agricultural periods. **Quality of learning remains very poor.** Teachers often shared that they felt they had enough resources, but referred to the minimum of textbooks and chalk and said it '*was better than before'* but our observations suggested that they managed with very few teaching and learning resources. **Not a single school had pictures on the wall or other visual aids.**

Lack of maintenance of equipment provided in health centres and schools is a key concern. Discussion of the findings (Section 4) indicates that more successful development interventions according to people have been the very simple service delivery type programmes such as provision of tractor services, electricity, NHIS, Livelihood Empowerment Against Poverty (LEAP) and gifts/donations than those programmes requiring behaviour change. The programmes requiring adoption of new agricultural technologies, market systems, toilet use, improved hygiene practice, looking after livestock or trees were less successful. Those programmes requiring establishment of systems for ongoing maintenance such as roads, bore holes, hospital transport were also less successful irrespective of the implementing agency. The discussion includes a review of one of the comparison villages where development efforts have actually been successful and finds this instructive in understanding where sub optimal results have been achieved in project villages.

2. Introduction

This report presents the main findings of the endline Reality Check Approach (RCA) study which was undertaken in July 2017 as part of the qualitative elements of the Independent Impact Evaluation of the Millennium Villages Project (MVP) commissioned by the UK Department for International Development (DFID). The ITAD team made a purposeful decision to implement the RCA as the last of the series of evaluation instruments so that it could provide an **interpretative lens** for the survey responses and could provide an opportunity for the team to follow up with ambiguities or new insights flagged up by analysis of the other streams of evaluation. It was undertaken six months after the MVP interventions finished which also enabled the team to gather insights into the impact of closure of the project and some of the sustainability measures which were put in place.

The study was undertaken by a team of eleven 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 Builli speakers. Overall management of the team and logistic arrangements were undertaken by Participatory Development Associates Ltd.

The report summarises the detailed field de-briefings gathered at the time of the field work together with analysis undertaken in sense-making workshops following the field work. The findings are intended to provide insights into the **attitudes, opinions and behaviours** of families living in poverty in the MVP 'project' and non-MVP 'comparison' villages selected and are therefore expected to complement the other qualitative research element of the evaluation (PRA study) as well as the findings from the quantitative surveys and other evaluation instruments conducted between June 2016–March 2017.

This particular report focuses on the **changes people have experienced** since the midline study was conducted in May 2015 and the overall changes experienced since the start of the MVP. It purposely takes the position of people themselves in looking at change and complements this with first hand observations and experience of the researchers from spending four days and nights staying with families in the villages.

The report is presented in three main sections. Following this introduction (Section 1), Section 2 provides an overview of the RCA study methodology. Section 3 presents the findings which includes highlighting the change people themselves found most significant and then provides insights into people's perspectives on other areas of change that the project was intended to have some effect on. The final section (Section 4) is a discussion that reflects on the findings over the entire longitudinal study (2013–17).

2.1 Methodology

The Reality Check Approach (RCA) is a qualitative research approach involving trained and experienced researchers staying in people's homes for several days and nights, joining in their everyday lives and chatting informally with all members of the family, their neighbours and others they come into contact with. This relaxed approach ensures that power distances between researchers and study participants are diminished and provides the enabling conditions for rich insights into people's context and reality to emerge. By iterative building on conversations, having multiple conversations with different people and having opportunities for direct experience and observation, confidence in the insights gathered is enhanced compared to many other qualitative research methods. As in this case, RCA is often used to understand longitudinal change through staying with the same people over a period of several years.

The RCA differs from most other approaches to research. Firstly, it is not theory-based so that there are no preconceived research frameworks or research questions. This is deliberate as the approach seeks to enable emic (insider) perspectives to emerge and to limit etic (outsider) interpretation or validation. The premise for researchers is one of learning directly from people themselves. Secondly, RCA is always carried out in teams in

order to minimise researcher bias and to optimise opportunities for triangulation. Thirdly, and importantly, RCA teams are independent and make this explicit with the people who participate in the study.

Our objective is to ensure that the views, perspectives and experiences of people are respectfully conveyed to policy and programme stakeholders. The researchers become a conduit rather than an intermediary. This is why RCA studies do not provide recommendations but promote the idea of sharing implications, which are grounded in what people themselves share and show us.

The approach builds on and extends the tradition of listening studies (see Salmen 1998 and Anderson, Brown and Jean 2012[3]) and beneficiary assessments (see SDC 2013) by combining elements of these approaches with researchers actually living with people and sharing their everyday lives in context. RCA is sometimes likened to a 'light touch' participant observation. But while it is similar in that it requires participation in everyday life within people's own environments, it differs by being comparatively quick and placing more emphasis on informal, relaxed and insightful conversations rather than on observing behaviour and the complexities of relationships. It also differs by deriving credibility through multiple interactions in multiple locations and collective pooling of unfiltered insights so that emic perspectives are always privileged.

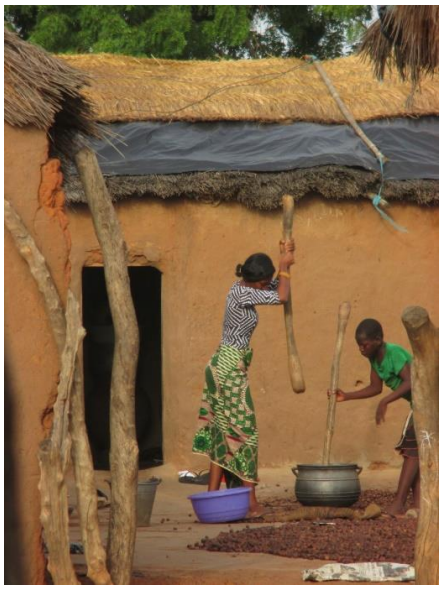
Important characteristics that are inseparable RCA are:

- **Living with** rather than visiting (thereby meeting families/people in their own environment, understanding family/home dynamics and how days and nights are spent);
- 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 take the lead in defining the agenda and what is important);
- Centring on the **household** and interacting with families/people rather than users, communities or groups;
- Being **experiential** in that researchers themselves take part in daily activities (cooking, helping in cultivation, collecting water, hanging out) and accompany people (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, everyday lives);
- Accepting **multiple realities** rather than public consensus (gathering diversity of opinion, including 'smaller voices');
- Interacting in **ordinary daily life** (accompanying people in their work and social interactions in 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.

This approach was used as part of the qualitative mix of approaches in the baseline study in February 2013 and midline study in May 2015 and this study involved re-visiting 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.

[3] Salmen, Lawrence F 1998, 'Towards a Listening Bank: Review of Best Practices and Efficacy of Beneficiary Assessments,' Social Development Papers 23, Washington World Bank; Anderson, Mary B, Dayna Brown, Isabella Jean 2012, 'Time to Listen: Hearing People on the Receiving end of International Aid, Cambridge MA: CDA.
SDC; Shutt, Cathy and Laurent Ruedin 2013, 'SDC How to-Note Beneficiary Assessment'; Berne; Swiss Agency for Development Cooperation.

A few substitutions in the research team had to be made since 2015. This was facilitated by former RCA researchers providing thorough briefings to those who substituted for them by living with their host households. Some researchers from round 1 (2013) re-joined the team. Refresher training was provided to all researchers and provided an opportunity the team to induct one new researcher.



RCA researchers immersed in 'their' households, chatting while engaging in chores.

RCA team members engaged all members of the family as well as neighbours 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), mill operators, school teachers, religious leaders, shop and market stall owners, community volunteers) through informal conversations. Areas for conversations were developed collaboratively with the team to focus on people's perceptions of change (see Annex 4).

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.

Each team member kept their own discrete field diaries, never writing in these in front of persons with whom they were conversing. These formed the basis of detailed de-briefing sessions held with each sub-team immediately after finishing each round of the study.

Study locations

The six RCA study villages are those that were used in the baseline and midline studies (February 2013 and May 2015, respectively). These had been selected from a longer list negotiated with MVP headquarters[4] 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 'comparisons' by the MVP where MVP interventions would not be directed. Both of these were selected from the list of 'comparisons' used in the quantitative study, one designated as *'near,'* i.e. close to MVP locations and where spill-over effects might have been anticipated, and the other was selected

[4] For full explanation of location selection see Endline Synthesis Report, 2017.

[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.

from the *'far from'* category. The villages are not named in this report in order to protect the identity, anonymity and confidentiality of participants.

However, the 'comparisons' are identified for the first time in this report. Throughout the entire longitudinal study and analysis none of the researchers except the team leader and two of the sub team-leaders knew which were comparison villages. This was done on purpose to keep the research team unbiased.

Table 1: Locations of study villages (project and comparison)

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 Builli (including mixed marriages) Small population of Fulani (settled 13 years ago) living on outskirts of village
A3 Comparison far	Mamprusi	Mampruli	4 hour drive or 2.5 hour motorbike/river crossing trip to nearest town in 2013, now improved road access including to the village itself so new transport options available	Mampruli speakers comprising 80% Muslim, 15% traditionalist and 5% Christian. Very small Fulani community on outskirts
B1	Builsa	Builli	35 minute drive on good road to nearest town. New feeder road provides added accessibility	All Builli speakers except Fulani (settled 18 years ago). Mix traditionalists, Muslim and Christian
B2a	Builsa	Builli	2 hour walk to nearest town.	Builli speakers. Mostly traditionalists with 25% Christians. No Muslims
B2b Comparison near	Builsa	Builli	Walking distance (40 mins) from thriving market and good transport access to variety of small towns. Expanding	Mostly Builsa comprising traditionalists and some Christians. Few Muslims
B3	Builsa	Builli	30 minutes from major town with good transport access	Builli speaking. Mostly traditionalists with a few Muslims and Christians Two communities of Fulani

Study households

The same households selected in February 2013 and stayed with again in 2015 were revisited in 2017 (total of 18 households[6]). These households had been selected initially together with the community to fulfil the following criteria:

- Poorer households;
- Households with different generations living in the house including, where possible, school-age children;
- Households in each village at least 10 minutes' walk from each other;
- Households located at the centre of the village as well as the periphery;

[6] There was some loss over the years due to death and moving

- 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.

We interacted with 106 host household (HHH) members (54 women and girls and 52 men and boys) in their own homes.

Other study participants

We had informal conversations with others in the community, some whom we met opportunistically because the families we stayed with interacted with them and some we purposely sought out (especially service providers such as teachers, nurses, traders and transport providers). We had detailed conversations with a further 543 people (268 women and girls and 275 men and boys) For full list of those met see Annex 2.

Timing

The RCA study was conducted in two rounds as described in the following table.

Table 2: Timing of the RCA study

Dates	Team A	Team B	Team C
June 30 – July 5	Location A3 (comparison)	Location B1	Location B2a
July 6- July 11	Location A1	Location B3	Location B2b (comparison)

Analysis

Each sub team of three-four researchers spent a full day for collaborative analysis with the team leader after each immersion. This involved sharing all their conversations, observations and experiences related to the Areas for Conversation as well as expanding these based on the insights gained from immersion. Each debrief started with discussing what people felt were the most significant changes since we last stayed with them. The collaborative analyses were recorded in detail in written notes combined with other important archived material (photos, drawings, maps of the village and charts) providing detail on households, villages and case studies.

A final whole team workshop was undertaken for two days to reflect on the findings and identify commonalities and differences across villages and households.

The team leader used established framework analysis procedures involving three of the typical four stages process:

1. Familiarisation (immersion in the findings);
2. Identification of themes;
3. Charting (finding emerging connections).

The key emerging narratives from these processes were used as a basis for the report writing.

Ethical considerations

The RCA team takes ethical considerations very seriously, especially considering the fact that the research involves living with people in their own homes. Like most ethnographic-based research, there is no intervention involved in RCA studies. At best, the study can be viewed as a way to empower study participants to be able to express their opinion freely in their own space. Researchers are not covert but become 'detached insiders.' People are informed that this is a learning study and are never coerced into participation. As per American Anthropological Association Code of Ethics, RCA adopts an ethical obligation to people '*which (when necessary) supersede the goal of seeking new knowledge*.'

Researchers '*do everything in their power to ensure that research does not harm the safety, dignity and privacy of the people with whom they conduct the research*.' Researchers asked people's verbal consent to be able to use their stories and insights, and assured people that they would keep their sharing off the record if they did not give their consent.

All the researchers were required to undergo Child Protection and Data Protection sessions in the Training level 1 and three study briefings (baseline, midline and endline) irrespective of whether they have previously gone through this. All data (written and visual) are coded to protect the identity of individuals, their families and communities. As a result, the exact locations and identities of households and others are not revealed in this report.

Study Limitations

- **Limited interaction with schools**: The study timings meant that most teams were only able to visit functioning schools on one day of the four they stayed in the community as they arrived too late on Friday or left early Monday. For those which included a full Friday, it was noted that these tend to be atypical school days often including sports and closing early. Teachers who live out of the community leave school early on Friday. Schools were closed on 3 July to commemorate Independence Day (1 July);

- **Limited interaction in some local level health facilities (CHPS)**: in B2a (project) and A3 (comparison) nurses had closed the facility in order to undertake outreach work;

- **Limited access to key service providers**: Many service providers such as teachers, health staff and local leaders (including Assemblymen) do not actually live in the villages which limited interaction with them, especially as both rounds included weekends;

- **Loss of institutional memory:** There had been a high turnover in staff in schools and health centres since 2015 and the continuity of interaction and institutional memory was lost. Some staff were extremely new in their positions and junior and deferred to 'in charge' when sharing information or updating on developments but these senior people were often not present;

- **Busy farming season limited interaction time**: In all study areas this was a busy period for ploughing and sowing as well as the height of shea nut picking and processing so people were preoccupied. Even when we accompanied them on these activities, they wanted to chat less than in previous studies. Furthermore, they were tired in the evenings and less willing to chat;

- **Time for chatting limited by TV**: Since four communities have got electricity there is a growing preference to spend evenings watching TV and this limited opportunities for chatting;

- **Overuse of alcohol:** In B1 (project) men, women, young and old drink quantities of local alcohol (more than other communities) which at times made them incoherent;

- **Some household members had died:** since 2015 two household heads had died;

- **Limited discussions on family planning**: substitutions that had to be made in the teams meant that one team was all male, so when this team went to B2b (comparison) they found it very difficult to engage women in chatting about family planning and breastfeeding;

- **Market has diminished**: in A1 (project) the weekly market is much less vibrant than before and there were fewer traders to interact with.

3. Findings

The findings are arranged in such a way as to give **priority to what people themselves considered the most significant changes** they have experienced during the four and a half years of the RCA study. The first section (3.1) presents the three key changes which people noted themselves as significant: (i) electricity connection; (ii) cowpea cultivation and (iii) increased mobility and connectivity.

The researchers had all engaged members of their host families as well as neighbours (total 594 people) in conversations around what changes people felt were important to them. These insights were collected and analysed to ensure that they represented the views across generations and from all members of the family not just household heads. The views of powerholders in the villages and service providers, while elicited were **not included** in this particular analysis as we wanted to understand the views and experience of ordinary people. The team made a ranking based on the frequency and vehemence of shared views of change, supported by our own lived experience with the families and their neighbours.

The next section of the Findings (3.2) provides people's own assessment of their family wellbeing based on conversations around personal change since 2015 and over the whole period of the time we have known them (2013–17). This comprised important reflections that people shared on the highs and lows of their lives over this period. It also reflects on well-being in a wider sense making a distinction between private and public poverty.

The third section (3.3) focuses on development interventions and people's experience of these. These findings emerge from conversations which were largely introduced by the researchers and based on the Areas of Conversations developed prior to the immersion in villages. These Areas of Conversations in turn were based on the ITAD developed Theories of Change so that conversations would include conversations about interventions which MVP (amongst others) intended to implement. The findings are intended to help understand how these interventions affected people and to compare these interventions with other (external) interventions and (internal) initiatives.

3.1 People's perception of most significant changes

The following are the three most important changes that ordinary people (not powerholders or service providers) felt had taken place over the last four and half years in order of priority.

People's most significant change: No 1. Electricity provision

The most talked about change this year was **the household connection to mains electricity in four of the six villages**. One comparison (A3 *'far'*) and one project (B1) village still do not have mains electricity. Where electricity is available, houses already constructed at the time of connection have their own household-level electricity meters. It is extremely rare to find a house without a meter even among the poorest households as householders realised that if they did not pay for the meter installation at this time it would be very difficult and expensive to arrange later.

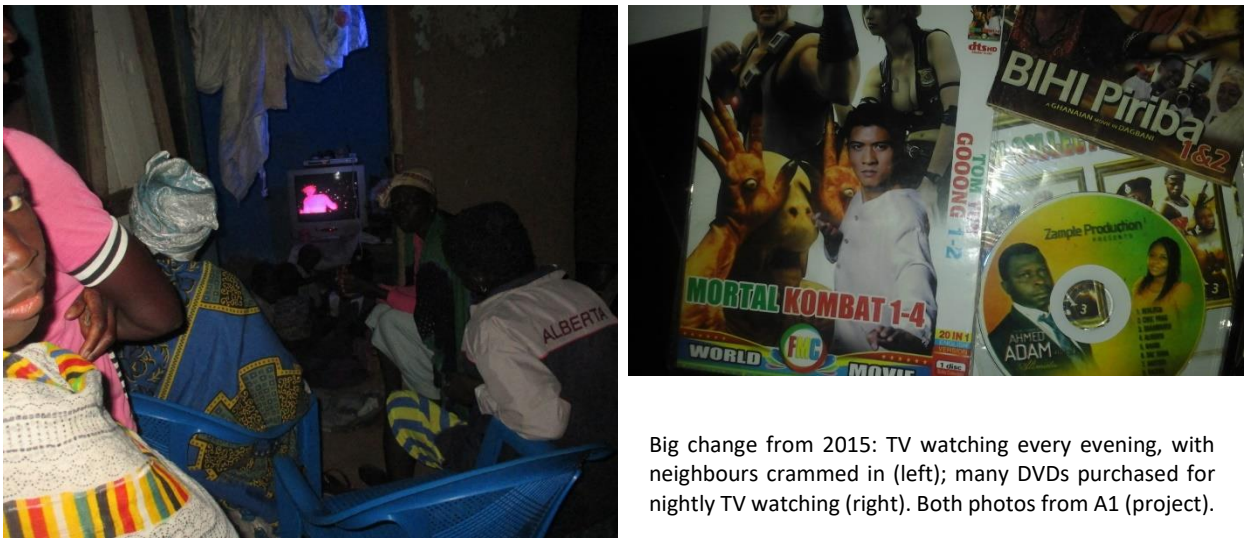
People felt that connection to electricity is a **major sign of development**; they enjoyed light at night, better milling facilities and cold drinks from shops but, without doubt, the most significant change was access to TV. Very many families own a TV usually bought second-hand with cash (around GHS 150, satellite dish around GHS 250). People told us it gave them something to enjoy especially in the evenings (Box 1) and made them feel *'connected'* but it also had downsides (see Box 2). In B3 (project) almost all the houses have been connected to mains electricity (in October 2016) but new house owners have been told it will cost them more than GHS 300 and that this will not happen until the next election campaign. Nobody here has yet received a bill (in nine months). In other areas, people

were rather concerned about the costs of their electricity. Like B3 (project), they too had not got bills up to a year from being connected and when they received them they felt they were very high and had '*not been warned*' (Box 3). A few indicated that they don't like to use gadgets that consume electricity and restricted their use to light bulbs and charging their phones but this was a rare position as TVs (and to a less extent, *'plates'* (satellite dishes) and fans) were much coveted. Many shared they were fearing disconnection as a result of failure to pay their bills, something they thought they would feel acutely having got accustomed to lights and TV. Whether they were conservative in their use of electricity or not, the costs of connection (GHS 40–120), electricity consumption (minimum GHS 2–15/month) and the need for bulbs (GHS 2.5 each which last about a month) were considered major additional cash expenses.

Box 1. Excitement over TV

Most houses in this village (project) have TVs since the electricity was connected last year. The Chief's son has a good business selling second-hand TVs which he buys in Walewale. In 'my' house the married son kept the TV and DVD bought last year locked in his own room. But the elderly aunties who live in the compound shared early on when talking about what had changed for them since I last visited, '*we now play in the evenings and go to bed later.'* I understood what they meant by '*play*' on the very first night as the son's room was unlocked and a music DVD was played. Small children gathered round the TV copying the dance moves and the adults (mostly women and teen boys and girls) congregated outside. They all knew all the songs and jiggled their hips to the music. Whereas in previous years we had retired to sleep around 8pm, each night these old ladies and a number of neighbours sang and danced until at least 10pm.

Field notes, A1 (project)



Big change from 2015: TV watching every evening, with neighbours crammed in (left); many DVDs purchased for nightly TV watching (right). Both photos from A1 (project).

Box 2. Concerns about TV

At least one-third of homes in this village (project) have their own TV now. One researcher noted '*in my house the children* (aged 6–12) *spent most of their time watching sometimes until 1am.'* The oldest married son who assumes responsibility for his siblings worries about the over-use of the TV and sometimes locks the children out of the house to prevent them from watching it. Another researcher living with neighbours of his former host family said that *'people trooped in all times of the day to watch TV. They even came in the evening when the father was not there. 15–20 women crammed in to watch a Nigerian movie which some tried to translate for them from English.'* The third researcher added that 'her mother' had loved it when the TV was working as her yard was '*filled with people all the time.'* Because people are staying up to watch TV, they shared and the researchers experienced that they suffer more from mosquito bites. The Junior High School (JHS) teachers, however, said that students doze in class, are preoccupied with what they watched the day before and come to school late.

Extracts from B3 (project) field notes (electricity connection was made in 2016)

There was talk in B2a (project) that electricity had been given to households along political party lines (Box 4). Despite being a project village**, neither the primary school nor the soon to be opened health centre have electricity connections**. In B1 (project) people were very unhappy that they still had no electricity connections at all (although they did point out a few poles had been stacked '*near the Chief's side').* They felt, like those in B2a (project), this too was a political decision saying things like, '*it is better to be Mamprusi and we should leave this Builsa kingdom… why would we bother to vote again?*' While these communities and the new householders in B3 (who had not benefitted from earlier connection) are waiting for the next elections for movement on the electricity connection issue, the comparison village (B2b) which is remarkable for its self-initiatives (see **Case study: 'Comparison village' moving forward by itself** p. 68) were actively seeking and collectively paying for an independent repairman for the transformer which supplies their electricity which seems to have fused, after their calls to the supplier resulted in them coming to give out bills and not to repair.

Most of our families kept the lights on in their sleeping quarters overnight saying that they liked to be feel safe, to attend to children in the night and this has become the village 'norm.'

Box 3. Downsides of electricity

One of the families we stayed with lamented, like others, that having electricity '*is adding to costs.'* The family of eight had a connection in 2016 but this was also a poor year for harvests as their riverside land was flooded. Father knows he owes GHS 88 but was confused when the bill jumped from GHS 3 in January 2017 to this amount in April 2017. Another of our families (with only four members) said they too have an outstanding bill of GHS 81. The third family we stayed with here shared that they thought it would cost only GHS 5 per month but were given a bill for GHS 106, of which they have only managed to pay GHS 66 to date. The fourth family has the biggest debt of GHS 170 and are sure they will be disconnected soon for non-payment. People here were widely of the opinion that they had been told their electricity was free for a year without realising, in fact, that the bill was accumulating.

Combined field notes, A1 (project)

The neighbour's father feels electricity '*is a burden'* and grumbles that he had to sell all his fowls to pay the bill. They have two TVs even though only two daughters now live at home. Mother thinks having TVs is really important as they can watch the news and '*feel connected.'*

Field noes B2b (comparison)

Box 4. Unfair access to electricity

People in the part of the village (project) I stayed in were angry that although holes had been made for electricity poles and poles were supplied in 2015, they had not actually been offered connections although other parts of the village had. They said this was because the Assemblyman was a National Democratic Congress (NDC) supporter and had lobbied the then NDC government but that they were '*punished for supporting PNC' (*People's National Convention). 'My' father showed me the unused hole for the electricity pole which he had since filled in because animals were falling into it.

Field notes, B2a (project)

The presence of electrical connections is also said to **be key in attracting and retaining nurses and teachers to stay in the villages.** In B3 (project) the MVP-funded teachers quarters are fully occupied including three teachers with families. Having electricity, they say, is essential as they can '*have fridges, satellite TV and computers.'* Talking with teachers in A1 (project) they shared that having electricity in the teachers' quarters '*made all the difference.'* One shared that his wife and young son are willing to stay there only because they can have TV. All the teachers living in the now fully occupied new teachers' quarters have TVs and decoders as '*social life in the village is difficult.'* The Parent Teachers Association (PTA) in B2a (project) says that the main reason health workers and teachers do not stay in the village is the lack of electricity. They have a new nurses' residence in the newly renovated health post (not MVP funded) but have yet to attract someone to stay there. In B1 (project), where MVP renovated the eight room teachers' quarters only two teachers and three nurses live here and there are three empty rooms '*because there is no light*' (and Fumbisi is only a short motorbike ride away*)*. Those who refused to stay in the quarters for this reason *'don't come to school in the rain.'* In A3 (comparison) seven new graduates from teaching college had been posted in 2016 but two had already left because of the poor quality accommodation and lack of electricity. The community health worker responsible for family planning told us she *'does not like to stay in the village because there is no light.'*

A number of **new grinding mills** have established in villages with electricity (see Table 3 below) or old diesel generator-powered mills have been converted, mostly it appears through non-metered connections. People say the '*electric mills grind flour softer and nicer'* (woman, B3 (project)) and there is '*no smell of diesel'* (another woman, B3 (project)). In A1 (project), women shared how pleased they were with the quality of the ground nut paste from the new electric mill. One mill here is in front of the home of one of our families and from observations and chatting with mill users, it was much more in use than in the past when operated with a diesel generator. People liked being able to bring small quantities to grind and appreciated that waiting times were much reduced.

Table 3. New electric grinding mills since 2015

New electric grinding mills since 2015		
B3 project	B2b comparison	A1 project
2	1*	3

*previously had to go into town

Although electricity supply is fairly constant and was very good when we stayed with the families, people shared that '*this week has been good*' but that in the rains the power often goes off. There have been problems with the wooden electricity poles installed as bush fires have burned some of

them and power is off for some time until the poles are replaced. People say they have heard that the wooden poles will get replaced by metal ones gradually.

Meanwhile, most of the solar-powered street lighting installed by the Cocoa Board in villages (B1 (project), B2a (project), A3 (comparison)) is no longer working. Batteries which were buried underground have been dug out and stolen, solar panels have been stolen or have ceased working. Only in B3 (project) do these street lights still operate.

The MVP strategy provided technical and financial support to 'top up' existing government services and lobbied the Ministry of Energy to expand services, submitted an official proposal for extending the grid into the project villages (32/35 villages).

People's most significant change; No 2. Cowpea cultivation

'*If you are not part of the cowpea business you are dead already'* (youth B1 (project)).

The main reason those who felt better off financially gave was the cultivation of cowpeas. This **practice has grown phenomenally since 2013 and people tell us this has not been driven by any external development programmes**[7] but fuelled by experiences exchanged between farmers through word-of-mouth (see Box 5). In B1 (project) people told us that it had totally reversed the seasonal migration habit and rather than leaving to seek work '*down south'* in the dry season, not only did people stay back to cultivate cowpeas but there was some employment now offered to outsiders, especially on the larger farms, and some people from Sandema and Fumbisi had moved here to cultivate too. Previously people explained that they had grown millet but problems with birds and general low yields led to abandonment of this crop in favour of maize. The earlier harvesting of maize (compared to millet) means that cowpeas can be sown in September/October and are harvested in December/January. In B3 (project), people said '*there is no need to go south now as the income from cowpeas is good and we have electricity.'*

[7] MVP, people say, had no influence on the cowpea cultivation practices. Even improved tractor services had no impact as the land is cleared for cowpeas using agro-chemicals.

They were very positive about growing cowpeas as the use of agro-chemical means that they can grow it on their own without others to help them using traditional reciprocal arrangements (considered time consuming) or having to pay for labour. In A3 (comparison) those who had grown cowpeas felt this was the main reason for feeling they were better off. For example, one of our families here had harvested 13 bags of cowpeas and had so far sold 5 bags at GHS 400 per bag. Another said they were able to buy zinc roofing with the profits from their cowpeas. However, by design we stay with poorer households and some of these noted that their inability to get good cowpea harvests were contributory to their state as their land had flooded, they had not been able to afford insecticides or they could not plough early enough because of cash shortage, '*we had counted on the cowpeas but last year* (2016) *we got nothing at all*' (family, A3 (project)) and '*my cowpeas looked like they were burnt…the leaves went red and we got no harvest at all*' (father, A1 (project)).

Box 5. The extraordinary rise of cowpea cultivation

Intrigued by so many people telling us how key cowpea cultivation had become in their lives and how many attributed a change in their outlook since they started to grow it, we tried to establish the drivers of this phenomenal uptake. Five years ago, cowpea was grown in riverine areas (e.g. Builsa north) but generally for consumption only as yields were not particularly good (less than three bags per acre) and no insecticides or weed killers were used. People told us they began to hear about a private farmer in Yagba who was '*getting 15 bags from an acre*' and wanted to find out how he did this. He achieved these yields by using chemicals bought from a single supplier in Bolga. Dealers quickly saw that demand for these chemicals was increasing and opened a number of outlets, permanent and at weekly markets, especially in Fumbisi. People copied the practice during 2012–14 seasons and were excited by the yields they got and the fact it filled an otherwise relatively unproductive farming period (October–December). Soon buyers were sending trucks from Kumasi, Tamale and Techema and farmers shared with us that there is a *'big demand down south.'* Large landowners also became interested in cultivating cowpea providing sharecropping opportunities. People described the market as commercial and competitive and shared the advantages of storage if they can afford to do so. For example, the 2016 harvest sold at around GHS 300/bag in December/January but rose to GHS 400/bag at the time we were staying in the villages (July 2017) with some people speculating that it would increase further to GHS 420 as it '*becomes scarce.'* Farmers told us that they do not consume the cowpeas themselves *'as they have too much chemicals in them'* and grow small amounts amongst their maize closer to home where they do not intensively use chemicals.

From discussions in sense-making workshop

However, we observed a downside to this incredible increase in cowpea production which largely gets swept aside by farmers '*we know we are using too much chemicals- that's why we don't eat the cowpeas ourselves'* (farmer) (see Box 5). Box 6 describes the intensive use of agro-chemicals, which has become the norm to adopt to provide the yields people want. The indiscriminate of agro-chemicals is discussed further in the section on agriculture below.

Box 6. Growing cowpea with chemicals

'My' father claims he can now get 12 bags of cowpeas from one acre since he has been using chemicals. Others in the village claim a more conservative estimate of between 6–8 bags. 'My' father explained that cowpeas do not need fertiliser and you can grow them year after year on the same plot and '*it only takes two months to grow'* in the traditional dry season. The process starts in September with ploughing (GHS 60/acre) followed by application of a broad-spectrum weed killer (referred to as 'Condemn') soon after (GHS 52/acre). Manual weeding is avoided by applying another selective weedicide (GHS 60/acre) followed by a spray insecticide (referred to as *'flowering medicine*') as the plants flower to kill caterpillars (also GHS 60/acre) and finally another spray to protect the seeds from weevils (GHS 15). If he decides to store with the hope of getting a better price, he uses Toptoxin tablets which he ties in a rag or plastic and puts into the sack of harvested cowpeas. He tells me you can keep it that way for 3–4 months but *'if you eat the cowpeas before then you may die'* and I could catch a strong smell of this in the stored cowpeas, even though it is now July and they must have been stored for more than six months. He told me he had picked all this up from neighbours and said '*everyone does it this way these days'* to get good profits. Together we calculated the cost of producing and transporting the cowpeas and using the more conservative estimate of yield agreed that he made about GHS 1600–2000 per acre.

Field notes, B1 (project)

Everyone uses agro-chemicals now (A3 comparison)

Indiscriminate disposal of agro-chemical containers (B1 project)

People's most significant change: No 3. Increased mobility and connectivity

Although roads have largely deteriorated since 2015, there is noticeable **increase in motorcycles and *motorkings* plying** them in both project and comparison villages. For example, despite the poor state of the road from Fumbisi to project village B2a with parts completely washed away there are plenty of *motorkings* which take about 45 minutes and charge GHS 40. However, *motorkings* don't come as far as the village anymore because people have found a short cut walk to the main road to avoid the extra GHS 2 cost. We also observed many more bicycles in this village and were told these were an *'early buy when people come back from south'* (seasonal migration work). In project village A1, there were many more motorbikes compared with 2015, which mostly men were using to go to their farms and to markets. The weekly market here has shrunk as a result and outside traders we spoke with felt they might stop coming here as people have easy access to other bigger markets and trade has dwindled. Furthermore, the road from Walewale (which people say was spot-maintained by MVP) has deteriorated badly and market trucks have difficulty arriving, so people have opted to go to Fumbisi market which, people say, is expanding and thriving. Certainly the number of stalls on market day in A1 (project) was much less than we observed in 2015. In B3 (project), the main road is currently being re-surfaced but has seen a major increase in use despite the disruption and dust. During the study

period there were many trucks plying with watermelons and cattle and an observed increase in *motorkings* and motorbikes. People also told us here and elsewhere that more buyers come for shea nut, charcoal and stones for construction.

In B2b (comparison), the main road is currently also being re-surfaced and '*is much worse than before'* but nevertheless has also seen an increase in numbers of *motorkings*. People feel that its proximity to town and the road itself has led to considerable development; neighbouring villages are expanding, stalls are being set up along the roadside and people are speculatively buying up roadside land. People here easily access transport to health providers (especially medicine shops) and to markets to sell their produce (something they prefer to do themselves rather than collectively – see Box 14). In another comparison village (A3) major improvements were made to the access road during the run up to the 2016 elections and there are many more motorbikes coming to the village (although the road stops immediately after the village so is not a thoroughfare). They have even created speed ramps which suggests that more vehicles are coming. In 2013 we saw no vehicles here at all yet now there are cars, trucks and two locally stationed *motorkings* providing transport, especially on market days. One of our mothers commented, '*if you want anything good we start it ourselves'* and was delighted that the community *'is more busy now.'*

In addition to physical mobility, people feel they are also a **lot more connected due to mobile phones**. Only in B3 (project) and A1 (project) was Tigo the better provider (Tigo had former partnership with MVP and installed masts in these two villages). Otherwise better signals were obtained from Vodafone (B1 (project) and B2a (project)) and MTN Ghana (B2b (comparison) and A3 (comparison)). Specially significant for people was having good MTN Ghana service which enabled access to mobile money, which was particularly flourishing in the two comparisons (A3 and B2b) and A1 (project) and B3 (project). People use mobile phones to keep in touch with relatives and sometimes to access work-related information (e.g. work opportunities in A3 (comparison)) and market prices (e.g. B2b (comparison) where Weinco helped establish this system). Despite purposively choosing to stay with poorer households, nearly all had mobile phones and most families we stayed with had more than one phone.

MVP worked closely with the government to develop plans to rehabilitate roads and build culverts and drainage canals to bring roads to all-weather standards.

MVP also lobbied telecom operators to expand mobile data connectivity to the project villages and successfully worked with Tigo up until they pulled out of the partnership in 2016.

3.2. Wellbeing

Study households perception of wellbeing

People generally conflated their family wellbeing with economic wellbeing, especially **having cash to spend**. As noted above and in previous RCA reports, there is an increasing need for cash. We noted in 2015 that a conspicuous change shared in every location was the increasing need for cash, whereas households had been largely cashless in 2013. In 2015, we noted that cash was 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 fashion clothes."
>
> RCA Report 2015 p. 4

These cash costs have been added to in the last two years by the costs of **electricity consumption** since connections have been made, **fuel for motorbikes** which are more widely owned, **hiring tractors** and **agro-chemicals.** There also seemed to be some evidence of increased expenditure to buy medicines. Expenditures on funerals continue to rise and be of concern to families.

Although access to electricity, more productive agriculture (notably cowpeas) and increased connectivity were universally noted as significant changes, about half of the families we lived **with did not feel that they were necessarily better off**. This was partly because we stay with poorer families who often benefit less from these changes. For example, those families cannot necessarily take full advantage of the increase in cowpea cultivation because they do not have access to prime (riverside) land, ready cash to rent tractors and purchase the needed weed killers and insecticides, and they are least likely to be able to afford transport (own, rented or fare-basis) or mobile phones which have increased people's connectivity. However, the most positive change was felt by our families in the far comparison village A3 where the combination of cowpea cultivation and increased migration '*down south*' for casual work among teens and young parents has provided them with cash income which they spend on farm inputs, home improvement and assets such as motorbikes and phones which impact their sense of connectivity.

Table 4 charts the perceived wellbeing over the years of the families we actually stayed with and cannot be taken as representative of the wider population. However, the reasons given for changing feelings of wellbeing reiterate the **importance of cowpea cultivation** (and remittance) and feelings of ill-being mostly related to ill health, death of key income earners or financial burdens especially associated with education. Households must have cash to be able to benefit from the cowpea phenomenon.

Table 4: Households' perception of their wellbeing in 2013, 2015 and 2017

Location	2015 compared to 2013			2017 compared to 2015			
	HH (worse off)	HH (better off)	HH (same)	HH (worse off)	HH (better off)	HH (same)	Comments
A1	2	2		2	2		One family is benefitting from remittance from a son who has started his own cocoa farm in the south while another has started buying and selling donkeys. One family which is worse off had a poor cowpea harvest (possibly because they did not apply insecticides) and the other also had poor yields due to flood.
A3 comparison	1	2			2	1	The combination of improved agricultural productivity (cowpeas) and the increased trend for teens to go south for casual work has meant that these families are less cash poor and have accumulated assets and renovated their homes. Our sense was that this was typical of the community and there is a good deal more optimism than in previous years.
B1	1	1	1	1	1	1	One family is worse off largely because the father is a heavy drinker. The Fulani family has remained the same but they are not allowed by the village to cultivate cowpeas. The third family

							has benefitted from very good cowpea harvests and plans to expand further.
B2a	1	2		1	1		Ill health has affected the wellbeing of one family here so they are not able to cultivate and the other feels better off because of remittances from his grandson.
B2b	3			3			These families do not reflect the aspirations of most in this village where the reopening of the dam has reignited interest in agriculture. People in this community generally feel there is much potential and have been able to buy assets with profit for last year. One of our families feels they have wasted money on education and another is struggling with both wives having been widowed.
B3	-	3			3		These families continue to do well, accumulating assets, eating well with aspirations to expand agriculture and get their children into salaried work.
Total	**8**	**10**	**1**	**7**	**9**	**2**	

The cultivation of cowpea is hugely significant as it is grown over the traditional dry season and means people are able to purchase food with cash from this crop (they rarely eat themselves) from January onwards. The parallel PRA study reports that people noted a significant shortening of the *hungry season* largely attributed to increased maize production but the RCA suggests it is a combination of this and cowpea production, which means people are more likely to have their own stocks of food and an ability to buy food during times which traditionally were extremely food insecure. Diets, as experienced directly by RCA researchers, had not improved much over the years but availability of cooked food each day in homes was better and, as in the PRA study, people talked less about hungry periods and going without food as a coping mechanism.

As the previous Section (3.1) implies, however, wellbeing is also influenced by changes in the community and electricity connections; mobility and mobile phone connectivity are considered key to people's sense of wellbeing. Furthermore, families pointed to other aspects of public service provision which improved their lives and made them feel less neglected and underdeveloped. Access to public health facilities (which has taken place in all six villages, project and comparisons) was especially noted and being able to '*live without pain*' because of the easy access to painkillers (at health centres and purchase in markets) or being able to address common health problems such as fever, cough and diarrhoea with readily available medicines were considered important improvements to wellbeing.

A further aspect of community wellbeing relates to political patronage. An election year, 2016 saw a surge in development programmes sponsored by electoral candidates across all six study locations. People in communities with family ties to MPs, even if they are in Opposition, feel that this will be good for the community and are optimistic.

3.3. How people perceive development interventions

The following findings comprise people's views of changes which the researchers specifically asked about. These are compiled from conversations with different members of the families we stayed with, their neighbours as well as village power holders and service providers. As noted above, conversations

were initiated by the researchers based on the Areas of Conversation (Annex 4), which in turn were based on the ITAD-developed Theories of Change for MVP intervention.

It is important to note again that most of the researchers asked **generally about change around these topics** and, because they did not have any knowledge that this was connected to any evaluation of MVP **listened to people's stories of change and drivers of change without evaluation bias** (and, of course, had no idea which villages are project or comparisons). Because this was our third time staying with the families, a high level of openness and trust had developed and researchers were accepted as independent of development programmes and as learners trying to understand village and household context and experience. Consequently, confidence in the insights is enhanced as people chatted easily and without intention to manipulate information for personal or community gain.

Health

Health Centres; built, rehabilitated and staffed

MVP constructed and refurbished community health planning services (CHPS) compounds, health centres, maternity wards and staff quarters.

During the first year, the MVP recruited key clinical staff such as community health nurses, assistants, midwives, laboratory technicians and other specialists.

Health centre construction and renovation has happened in both project and comparison villages. In three of the four project villages this was funded by MVP. In the fourth project village and the two comparisons, the work has been financed by Members of Parliament (MPs) (incumbent or during the election periods). In all areas, these improvements have been welcomed and people say they have, on the whole, made a difference. However, with the availability of these health services some people shared that people more readily take medicines *'even for minor things'* and there has been a noticeable increase in self-medication using over-the-counter medicines available from medicine shops and peripatetic medicine sellers.

The following provides an overview of changes as people described them to us as users and service providers.

The MVP funded health centre construction and rehabilitation

Village A1 (project) did not have a health facility at all in 2013 and people had to travel between 40 minutes and one and a half hours to reach a clinic. The MVP funded CHPS was opened before our second visit in 2015 and had three full time graduate staff and villagers told us then that they thought the health workers were friendly and '*treat us well.'* Since then it has a further three staff and has carved an important niche for itself in the community and people appreciate that they no longer have to travel far for health services. The numbers of outpatients each day are about 10 and the labour unit is, people say, used by all the new mothers unless referred elsewhere because of complications. The six nursing staff including one midwife are all single, reside in quarters in the village and are all paid for by Ghana Health Services, as are the security guard and cleaner. They are supported by four community heath volunteers (of whom two were former MVP supported volunteers). They said that they don't get the free supplies of medicines they got under MVP and so *'if people come without NHIS, we have to charge whereas we used to be able to just ask for a GHS 5 contribution.'*

The five-year-old basic CHPS near to village B1 (project) was renovated by MVP and birthing facilities, a borehole and solar panels added. Four staff live on site and in the teachers' quarters. The borehole

became a key source of water for the community during dry seasons as access to water in this village was extremely difficult. Nurses told us that since SADA has left the supplies of medicines have become less frequent although they are still better than they were in 2013.

In 2013 before MVP supported rehabilitation of the Health Centre in B3 (project), we reported that very few patients used this facility. Observations and discussions with the staff indicate that numbers using the facility are still very small because of its proximity to the main town. In fact, the labour room has not been used at all in the last month before we stayed in the community. The out-patients waiting room rarely had more than one patient (watching the TV installed by MVP purely, we were told *for entertainment* purposes not information). Yet there are now seven full-time accredited nursing staff including two midwives posted here whereas there had been only three staff in 2013. This had included an extremely motivated community nurse who is credited with much of the hygiene and family planning education but who has since left (see discussion of 'heroes' in discussion section below). Now people complain that the community health nurse '*hardly ever comes'* and the resident nurses '*wake up late and come out* (of the quarters) *only when they feel like coming.'* Partly because this facility is under-utilised they do not experience shortage of supplies.

Renovations and construction supported by others

The health post at B2a (project) was a former Social Investment Fund supported facility which was not included by MVP in its rehabilitation schedule. It was occupied by squatters in 2015 and has just recently been renovated, reputedly with funds secured by the former MP and is poised to open soon. People are optimistic that this will be elevated to a CHPS status and are awaiting the posting of nurses.

The 'far' comparison (A3) had been promised a health centre in 2013 by the MP but the construction was abandoned and then later resumed. By 2015 a five room health centre complete with birthing facilities was constructed and opened. It is now staffed by three graduate nurses and employs security and cleaning staff. It is currently supported by a Catholic Relief Services programme focusing on quality and accountability.

Health facility access already good

One of the comparison villages (B2b, 'near') enjoyed access to a Health Clinic (which is a higher level than CHPS) throughout the study period. This facility has had more than twenty staff and treats between 20-80 out-patients per day. It has been supported by various Government and non-government programmes and has generally been able to maintain good health services and the 'in charge' says they usually have a good stock of medicines. They are renowned for good outreach services. Its only persistent problem has been the access road which has been poorly maintained despite recent efforts by the District Assembly to repair it and, more recently, over subscription of their services because their catchment area is expanding.

Transport for health

MVP procured two ambulances and *motorkings* to improve transport, especially for pregnant women, to CHPS and for emergency referrals to hospitals.

There has been an effort by both MVP and others to improve emergency and referral transportation especially for pregnant mothers. This included provision of ambulance and *motorking* services. Village B3 (project) was the first to benefit from free ambulance services supported by MVP and based in Fumbisi but easily requested by the nurses in the B3 CHPS through mobile phones. However, they tell us that the MVP ambulance has broken down and now patients have to pay GHS 80 for an ambulance.

The midwife here felt that during MVP time they should have been required to pay a *'token then the ambulance could have been mended… now SADA has moved out and it will just rot.'* The *motorking* that was at this health facility has also broken down and *'nobody knows where it is.'*

Village B1 (project) was provided a *motorking* by MVP but it has not been working for some time now and has been left uncovered so people worried it is '*exposed to the elements.'* They also have access to an ambulance based in Fumbisi but the nurse in charge told us that it is '*no longer free for maternity cases*' costing GHS 40 to Fumbisi or GHS 80 to Sandema. They refer to the system as '*cash and carry'* and no journeys will be made unless paid for up front. Some families told us that actually they get charged more for the ambulance than this and may have to pay GHS 100. Nurses felt there had seen a decline in the use of the ambulance since the introduction of fees.

In village A1 (project), the *motorking* was donated to the CHPS by an NGO but people did not want to pay for the services. To be collected from home and taken to the CHPS, the cost was GHS 5 (GHS 2 for fuel, GHS 2 for maintenance and GHS 1 for the driver). As it was not being used we were told that the Ghana Health Services *'director'* ordered it to be removed. Here people can get an ambulance from Yagba hospital for free but to go to Walewale costs GHS 195.

B2a, despite being a project village, has no improved ambulance access to hospitals but pregnant women are told they must have ultra-sound scans before the nearest Health Centre will accept them to give birth. This requires a lengthy trip to Bolga at a cost of GHS 20 and they say this is sometimes fruitless because the ultra sound machine is not working.

In the 'near' comparison (B2b) the *motorking* supplied by an NGO is still working and has been improved by the addition of a metal roof. There is apparently a 'hotline' phone number for the driver but villagers did not mention this.

In the 'far' comparison (A3) the NGO-donated *motorking* still operates but the battery was stolen so it has to be started by pushing. Patients are required to pay for fuel and food for the driver but say they cannot afford this and only use the *motorking* if it is very serious *'when everyone knows that one of your legs is here and the other is in the other world'* (close to death) and you have no option. Here where there continues to be a strong preference for using TBAs, they feel the *motorking 'shakes the baby to come out.'* One of our mothers shared that she had had a complicated pregnancy and the CHPS nurse had referred her to Yagba. The *motorking* cost GHS 20 but then she was further referred to Sandema and the ambulance cost her GHS 150.

Community Health Workers (CHWs)

The CHW programme is described as '*the cornerstone of the SADA-MVP's health sector.'* SADA-MVP paid these 'volunteers' to manage 100–200 households with intention each should be visited every 90 days to provide outreach services under the supervision of the Community Health Nurse.

It is important to note that the CHW role is one which has existed for many years prior to the project and is integral in Government of Ghana health programming so MVP intervention was intended to **strengthen their effectiveness** rather than introduce anything new. This included provision of these volunteers with a monthly allowance/stipend, resources and training.

It is very difficult to assess from the RCA immersion study the impact of the CHWs. People do not spontaneously mention them as a significant village resource and regular home visits (at least every

90 days) do not actually seem to have happened consistently, if at all.[8] Nevertheless, they have been at the frontline of promoting public health messages more often through gatherings than home visits and some CHWs (see discussion section) have been exceptional and have visited homes. There are between four and six community health volunteers (CHVs) in every village irrespective of whether it is a project or comparison village and it seems they become **active when different programmes call on them** for example to distribute bednets, to attend training programmes and to support public health outreach activities, including immunization. Home visits were not therefore ones to check on the welfare of families and provide ongoing health and hygiene advice but to summon people to gatherings or to instruct them about new initiatives such as the toilet construction programme.

We met with CHWs in each village. Those in project villages talked about the withdrawal of MVP and their disappointment about no longer being paid although one or two have secured payment from the National Youth Employment Programme [9](some would be too old to qualify). Some former CHWs have given up since the withdrawal of MVP but others say they are *'ready to serve.'* The ones we met in one project village shared that their phones which had been provided by MVP were taken away about three months before the end of the project as *'they said they were faulty'* but were replaced with second-hand phones *'so we were duped.'* One said about the replacement phone *'it was a useless phone- I don't even know where it is now.'* Soon after, they were told by MVP to return their bikes but they refused. They felt '*unappreciated and SADA never said thank you.'*

Box 7: We want to serve people

There are six community health workers in the village I stayed in, one of whom has been a volunteer since 1992. They told us they are continuing to work despite the withdrawal of MVP support as *'we want to serve people*.' Re-meeting one we had met during the MVP project time he shared that he felt more motivated with the project support. Now he still wants to serve but gets no financial support except when they get called to a briefing in Fumbisi when '*we get a transport allowance of GHS 30–50.'* But some community members are scathing saying '*they do something to represent something'* meaning they are volunteers in name only.

Field notes B3 (project)

[8] This seems different to the experiences shared in the PRA sessions.

[9] NYEP is a Government programme under the Ministry of Youth and Sports to provide training and short-term employment to youths aged 15-35 in agriculture, health, education, law and order, sanitation and rural communities.

Box 8: Taking over the community health workers

In two locations, the international NGO Plan Ghana has just begun a new programme involving the former MVP employed community health workers. People were a little unsure of the exact nature of the Plan Ghana five-year programme but described that it involves a special supply of medicines which are kept at the CHPS by the community health nurse but are accessible by the CHWs. These medicines include many of the same ones previously held by CHWs under the MVP programme such as oral rehydration salts, *Amodiaquine* (malaria treatment) and aspirin. But CHWs tell us that there are no syrups for children as there were with the MVP kits and don't want to give them tablets. They also complain the variety of medicines is restricted and provides no more choice than the CHPS, again different from the MVP sponsored programme. They query the point of this new programme, feel it is less good than the MVP programme and rue the fact that they will get no payment this time either. Some shared that they are not as active as they were under MVP because '*we are not paid*'

Field notes (project location confidential)

Interventions and services promoted (mostly) by CHWs

Uptake and use of National Health Insurance Scheme (NHIS)

MVP intended to encourage the uptake of NHIS, initially through free registration at village level and subsequently through Community Health Worker outreach.

There are mixed views about the value of NHIS, especially since people have had to pay for the renewal. Early in the MVP programme NHIS was distributed free in project villages. Some (such as comparison village A3) received NHIS free for periods of time sponsored by their Member of Parliament (MP) and some people had got NHIS for a period of time with their LEAP[10] entitlement.

Renewal rates are low, firstly as people argue, like this woman (B2b (comparison)), that if one is '*never ill there is no point in renewing it.'* Furthermore, the fact that the NHIS does not cover all medicines and treatments and that local health centres '*often run out of the drugs needed'* so people have to purchase medicines in the market anyway has diluted people's enthusiasm. As one neighbour, echoing others, shared *'it only gets you the folder[11]… You have to buy the prescriptions in the market… before we could get all the drugs but not now'* (woman, B2b (comparison)). Another man said that they have never renewed their NHIS since '*we had a bad experience when living in Accra and had to buy all the drugs anyway'* (Father B2a (project)). People have also been caught out by the fact that renewal is back dated to the previous expiry date and so think they have paid for a year but find that they get only a few months because they were late in making their renewal. Mostly, people maintain NHIS is only for those they consider at risk; the very young, new mothers, elderly and some with non–communicable ailments which require regular medication and they are very satisfied with the treatment they can get for these people. Others say that they would rather pay for *'expert opinion'* when needed rather than participate in the NHIS.

[10] LEAP is the Livelihood Empowerment Programme Against Poverty, launched in 2008 by the Government of Ghana as part of its National Social Protection Strategy. It is a social cash transfer and health insurance programme for extremely poor households.

[11] Meaning the medical record folder kept at the health clinic.

In the four and half years we have staying in the villages there has been a noticeable **increase in medicine sellers** who either sell from their motorbikes or set up stalls in the weekly markets as well as an increase in medicine shops in bigger market centres. Concomitantly, our families increasingly use these services and the purchase of over-the-counter medicines has risen. Talking with these medicine sellers they tell us that the health centres often run out of supplies, the shops carry medicines in addition to the NHIS restricted list of drugs and that they provide a more convenient service which people can use without queuing and when they are going to market for other reasons. People also like the fact that they can purchase on credit with the sellers who come to the house and can pay later. Sitting with these medicine sellers for periods of time we observed that they are indeed well patronised with all ages coming to buy a few tablets at a time, mostly painkillers or drugs they know by name from earlier use or from advertising messages on the radio and TV.

Table 5: Who uses NHIS now?

Least poor

Location	Before	Now	Why?
B3	✓	x/✓	Grandma's expired 2016, only keep those for '*mother and baby as more likely to fall sick'*
	✓	(✓)	*Only for those likely to get sick* (grandma, son and three young children)
			No information
B2b comparison	✓	x	No money to renew and worries about this
	✓	✓	Very enthusiastic, whole family covered '*even though I have little money I buy this'*
	✓	✓	Both elderly have and like to keep it active
A1	✓	x	Can't afford
	✓	x	
	✓	x	Not renewed after 2015 when they had to pay
	✓	x	
B1	✓	x	Provided for head of family originally by LEAP, but since expired cannot afford to renew. Children's card not renewed since mother no longer earns cash in Accra
	✓	x	Expired in 2016
	✓	✓	Supportive & like the treatment at the Health Centre
B2a	✓	x	Feels there is no point as *'you have to buy drugs anyway'*
	✓	✓	Renewed just recently because father has hernia
			No information
A3 comparison	✓	x	MP provided for two years (prior to election) but since expired people reluctant to renew because of the cost.
	✓	x	
	✓	x	
total	17	4 (3 partial cover)	Significant drop in uptake

most poor

Managing mosquitoes and malaria

MVP intended that CHWs would distribute bed nets and manage outreach awareness on malaria, carry out rapid diagnostic tests to detect malaria at the household level and refer patients, administer or recommend treatments.

We asked people about the incidence of malaria and both villagers and health staff indicated that **malaria incidence had, in their opinion, reduced in both project and comparison villages** but the drivers of this change are less clear. People particularly noted the efficacy of the indoor residual spraying (IRS) programmes which all the study communities have benefitted from, either through the President's Initiative for Malaria Control (funded by United States Agency for International Development (USAID)) or the AngloGold Ashanti Malaria Control Ltd (AGA Mal) programme (funded by Global Fund). In A1 (project) people said they got malaria much less often nowadays and pointed to the USAID IRS stickers pasted on their front walls and gates which indicated they had sprayed recently. They said the reason they do not get malaria is that '*they* [IRS] *come every year.'* The nurse in A3 (comparison) said that malaria has much reduced '*because they use bednets'*; but when we told him that from our direct experience most don't actually use them in this community he said it must be the IRS. In B3 (project), both community health workers and the nurses in the CHPS said that the incidence of malaria has decreased and pointed to the IRS programme. The USAID funded programme has been more regular (annual) and timely (before the onset of the rainy season) than the AGA-mal programme.

People in B1 (project) which was still awaiting the AGA Mal spray programme in July (2017) while we stayed with them were experiencing extremely high levels of mosquitoes '*which start biting from late afternoon'* had not had spraying since 2015 but were told it would be happening soon. Because of the delay in IRS and because this was the worst time for mosquitoes, this was the first time in the three times we have stayed with families in this village that they actually used mosquito nets with some having them ready strung outside. In B2a (project) which had also not received AGA Mal IRS since 2015, mosquitoes were in high numbers too. People complained to us that '*AGA Mal should come every year'* but, like those in B1 (project) had seen *'the* (AGA-Mal) *cars so we think they will come to us soon.'* But here our families were not using nets sayings things like '*it is normal for me to just roll in a blanket- mosquitoes are only annoying if they sing in your ear'* (father, 92) and '*we have nowhere to tie them* (the nets)*'* (father, 40s) and *'I can't breathe if I use it' (*neighbour mother*).* One father (70) just wraps his torn net around himself.

B3 (project) is another AGA-Mal spray area and also had not been sprayed yet but people had heard from the radio that this would happen soon. Here, probably because it is less close to open water, the mosquitoes were not so prevalent though they did use nets on occasions '*when the mosquitoes were bad'* and were aware that this prevents malaria. But since they have electricity and are watching TV in the evenings, they are finding they get bitten more often.

B2b (comparison) was last sprayed under the AGA Mal programme in 2014 and we noted that the mosquitoes were the worst we had experienced and most people were using nets, even outside. Here they were especially conscious of the threat of malaria. One father (40s) we stayed with shared that his NHIS has expired and as he was really worried about the cost of anti-malarials so he unfailingly tied up mosquito nets each night for all members of the household.

Where the USAID funded programme had already completed the 2017 spray programme in May (A1 (project) and A3 (comparison)), mosquitoes were not a problem and nets were rarely used (except for very young children and one case where a young couple had refused entry to the spray programme).

Some people noted that CHWs in both project and comparison villages had been active in sharing information about the link between mosquitoes and malaria and we also noted that people were more likely to make the connection when chatting than they had in 2013 when mosquitoes were really only talked about in terms of '*being a nuisance.'*

We saw bednets were used for the first time this year (2017)- this was partly because the timing of the study was 'mosquito season' but in the case of village B1 (project) where these photos were taken there had not yet been IRS spraying and mosquitoes were many. It is clear for the photos that the bednets are new looking and not much used except in exceptional times.

People find it difficult to reconcile the night heat and using bednets. This small boy was wrapped in the net to sleep outside but got too hot.)

Messages like these painted on the side of SADA buildings had no impact on people's understanding of the use of bednets. The pictures could not be interpreted and the words are written in English.

People continue to be creative with bednets; using them as screens for toilets and bathing areas, to protect crops while growing and in storage

Toilet construction and use

MVP intended to use the community-led total sanitation approach to increasing the construction and use of household toilets. This was to have been accompanied by CHW education programmes on hygiene and sanitation.

In all four project villages there has been a sudden and very visible increase in household toilet construction which people shared mostly dates from early 2016. As Boxes 9 and 10 describe, people talk about being '*told to build toilets'* often accompanied by threats that they would not benefit from future programmes if they did not comply. Some particularly noted that '*SADA'* had said *'we must have toilets.'* There was no suggestion that the community-led total sanitation approach had been followed and emphasis had only been made of toilet construction whereby CHWs required every house to have a toilet. A few people (only in A1 (project) and B2a (project)) shared that they were also told about hand washing and that they should arrange a container of water (near the toilet) but other than these basic messages people said they received no other advice. Local people, often the CHWs were trained centrally on how to make slabs. Householders were told to dig holes '*waist deep'* and then were given slabs and other materials to complete the toilets.

These photos represent the common condition of toilets in project areas – rushed, poor and unfinished construction. The middle two photos show how the toilets have been blocked off because people worry about toddlers and animals falling in the pits.

Rains in 2016 have meant that in B3 (project) and B2a (project) many of the toilets have collapsed already. People shared across project locations that the construction had been rushed and poor but, since they did not intend to use the toilets, simply shrugged their shoulders when talking about it Only a few indicated to us they would re-build and this was more related to the concern that they might miss out on other programmes if they did not rather than with the intention to use the toilets. The series of photos above provides an indication of the poor implementation of this programme with collapsed constructions, unfinished construction and abandoned buildings across all the MVP project

villages. The middle two photos show how people have tried to make their unused toilets safe to prevent animals and toddlers falling in; blocking off the door and covering the hole with a rock.

Only two of our twelve families (project areas) use their new toilets and this is only for poo and baby poo is disposed of beside the house. They had not arranged water (or soap or ash) for hand cleaning near their toilets and we did not observe this among their neighbours or others in the community. In fact we observed only a handful of people using their toilets at all across all of the locations and never all members of a family. Most people continue to prefer '*free range'* and are used to getting up early in the morning to poo in the forest, under '*nice baobab trees'* or among rocks away from the village. Many are appalled by the thought of defecating in a toilet near the house and fear the stench and that it will attract flies. Others say they *'don't have time to clean a toilet,' 'don't have money to complete… the bush is still free'* and our own experience indicates that the toilets are airless, dark and feel unsafe with all but two of our researchers prepared to use them themselves.

The two comparison villages (A3 and B2b) do not have toilets and one (B2b) had no visible faeces lying around because the dogs and pigs had eaten them. There were faeces visible in the other comparison, a Muslim community without dogs or pigs. Neither community felt they had any problem with diarrhoea although the latter had noticeably large number of toddlers with pot-bellies.

Box 9: Told to build toilets

The most obvious change when we entered the community was the proliferation of toilets. They were everywhere, almost every house had one. However over the following days we noted not a single one was being used for any purpose at all. '*They just came and wrote out names… Then SADA gave us cement and told us we must build a toilet'* one mother (49) shared*, 'we did not have money to buy drink and food for the local labourers who helped construct… and we never use it."* The researcher staying with this family shared they she would not use the toilet either and '*was scared to enter…the ceiling was very low and there were no windows.'* Two other researchers said they too could not use the new toilets as they were '*too hot, too low and the hole in the ground was scary'* and they felt they might collapse and fall in. The team said that *'some people will tell you they use the toilets but they never do… but most indicated that, 'the bush is so vast for us.'* In previous years, before toilets, none of the households we stayed with wanted to have toilets as they felt it was easy to sneak into the forest away from the village.

Combined field notes, B1 (project)

Box 10: Rush to build toilets

Early 2016, people said they were *'told to construct toilets or else they would not get other benefits.'* They were promised support with the cement, zinc and iron rods. But the supplies came very late from MVP and people had to build with mud bricks '*which have washed away'* (father). Others pointed out that the holes they had made had '*caved in with the rains.'* One of the problems was that when digging the holes they hit rock very soon. We spoke with the storeman for the materials and he said '*I asked people to build the hole first and then to come to me and I would give them the slabs, wire mesh, cement and other things needed to complete the toilet and would arrange the labourers..'* He grumbled that although he had been told he would be paid for this he wasn't so he kept the remaining wire mesh for himself. One of the families we stayed with said they plan to re-build their collapsed toilet *'in case some comes to check up and we don't have one'* and another also said he would try to rebuild in the dry season although they have no plans to use it. In previous years, people here have told us that pigs and dogs were efficient at eating the poo and they did not have a problem and rarely suffered from diarrhoea. None of the families we stayed with actually indicated before that they saw a need or wanted a toilet. The researchers had noted in previous years that this was one of the cleanest villages they had visited and never saw faeces lying around and also commented on the efficiency of the pigs.

Combined field notes B2a (project)

Use of new school toilets (built by MVP and, in comparison areas, with money from the Global Education Partnership project (GPEG) World Vision or Catholic Relief Services) was rare and primary and Junior High School (JHS) students were observed popping out of classes to pee and poo in the long grass or behind trees in all study areas. We visited school toilet blocks and found them to be largely unused although in B3 (project) the new toilets were used for poo and were smelly but here there was no hand washing facility. In B1 (project) there was evidence of use of the new six seater toilet for poo but the doors had come off their hinges and the rainwater poly tank beside the toilet had no water despite being the rainy season. NGOs have recently built toilets in the primary school in one comparison area (A3) including special facilities for girls to be able to change sanitary pads but the children told us they '*like using the bush'* or go home. Here, people told us '*donors say they don't want any faeces in the community'* and felt that it was odd that all these new toilets were being constructed when the teachers quarters were uninhabitable.

An NGO has introduced tippy tanks (above) for handwashing at the A3 (comparison) primary school. They were empty and nobody was using (above).

Veronica buckets were discarded unused in a storeroom in A1 (project) primary school (right).

In addition to the lack of use of school toilets, there were no working provisions for hand washing at schools. In B3 (project) as noted the 'veronica buckets' intended for post toilet use by students were instead installed outside the staff room for teachers to use to '*wash off chalk,'* the students were '*not allowed to use them'* and there was no source of water or soap for students. Life Care Ghana[12] had conducted hygiene education sessions at the school but there was no uptake or means to ensure better hygiene practice as a result. In A1 (project), we found never-used 'veronica buckets' in a store-room. In the comparison village (A3) where NGOs have recently started a health programme, outside the new toilets were 'tippy tanks' and ash for hand cleansing but we never observed anyone using this.

Access to drinking water

MVP intended to ensure that households had reasonable access to drinking water through their rehabilitation and construction of boreholes programme.

Staying in communities later in the year than we have done in 2013 and 2015, we found no water shortage problems because aquifers are less depleted (resulting in wells having water in them) and people are also able to use rainwater collected in small tanks or basins off zinc roofs for bathing and washing dishes. B1 (project) suffers severe water shortages in the dry season and in 2015 we noted that water access was the biggest problem for people living here.[13] There are only two MVP constructed boreholes; one at the health centre and the other one at the school. But the latter is shunned because '*it is smelly.'* We noted long queues and people reverting to using dam and river water in the dry season suggesting these are insufficient. During the rainy season (as we experienced during this last immersion in July 2017) the villagers have access to six wells and the pressure on the boreholes was less so people did not complain about water problems. Our families here mostly had arrangements to collect rainwater in basins and so only used the wells or boreholes for drinking water.

Elsewhere villagers in both project and comparison villages did not face as severe water shortages as B1 (project) any way in the dry seasons, were also using wells (closer than boreholes and often said to have '*better tasting water*') and collecting rain water in pots and basins. Nobody across all study locations boils water or otherwise treats the water prior to drinking. Some drink dam or river water (e.g. A1 (project) and B3 (project)) claiming that as it '*is running well it is OK'* and use old discarded agrochemical containers to scoop the water.

[12] Life Care Ghana is a small local NGO

[13] See RCA Mid Line study report, 2015

Environmental health

MVP intended to improve environmental cleanliness through its partnership with Zoomlion.

The Zoomlion bikes (left) have broken with *'no plans to repair'* and beside the Zoomlion skip lies lots of rubbish in the market right) (A1 (project)).

MVP had an arrangement with its former partner Zoomlion[14] to sponsor cleaners within project villages which Zoomlion would supervise and support with training, refuse containers and other waste management equipment. Only village (A1 (project)) still has a Zoomlion trash skip in the market place but the workers have not been paid for the last six months since MVP left.

Typical sludge of grey water from houses (this example from A1 (project)).

We met one of the workers who explained that his Zoomlion bike has broken and he now only cleans the market weekly just before it opens. The Zoomlion skips that used to be in B1 (project) and B3 (project) are no longer there although people say there is a functioning Zoomlion programme to collect trash from the homes of the elderly in B3 (project). However, despite these efforts, rubbish is still mostly dumped randomly in ditches beside houses and farmland and includes hazardous items such as empty weed killer and insecticide containers. While families do not burn the trash in villages B3 (project), A3 (comparison) and B2b (comparison), families said they do burn from time to time in B1 (project), B2a (project) and A1 (comparison). In all areas animals rummage through the trash, but this is particularly true where dogs and pigs roam. A noticeably worsened problem (observed by the researchers but not commented on by people themselves) is that of grey water disposal. Grey water

[14] Zoomlion is a Ghanaian limited liability company registered in 2006 which specialises in waste management. It has government and private sector clients. Among its work with Government it has a project to provide work for National Youth Employment programme (NYEP) participants.

is contaminated by urine and may often be contaminated by faeces (especially but not exclusively from washing baby clothes). In two project villages (A1, B3) and a comparison (B2b), slimy streams emanate from most houses carrying waste water from bathing (and therefore by implication urination too) and washing dishes. Fowl and pigs wallow in these in B2b (comparison) and B3 (project), ducks feed in the stagnant pools in A1 (project).

Maternal and child health

MVP intended to train midwives, recruit midwives (bringing them out of retirement to cover for shortfall in midwifery services), train CHWs and CHNs to provide improved information and care, including home visits, awareness programmes on family planning, improved antenatal and post-natal clinic services. A key element was to promote institutional births.

Family Planning

MVP intended for CHWs to make regular house visits and one of the many health messages they would promote would be family planning. They were also supplied with condoms to distribute.

The most open to talk about family planning were people in comparison village B2b where men echoed such sentiments as, *'nowadays we are willing for our wives to use (family planning) because too many children is a burden'* and *'if a wife gives birth to two or three, she will just go and do it (get family planning) anyway.'* Women also shared that they wanted fewer children because of the high costs of living and *'will have to spend more'* and prefer the injection method. Their local health facility has an active family planning programme (also supported by a NGO project (see below)) and they encourage men to come along with their wives for counselling *'but they rarely come'* (in-charge nurse).

Similar views were heard for the first time since we started visiting in 2013 in village B1 (project) but among women more than men. They commonly said things such as, *'If not for family planning I would have three more kids… how I would care for them?'* (mother) but getting family planning was often clandestine as *'men might not agree – especially those who drink.' 'My husband is happy if God gives him up to ten children… but my body needs to recover and have the baby grow a little before the next one'* (neighbour mother). The nurse here confirmed that women often came to the health centre without the knowledge of their husbands.

In B2a (project) there seemed to be a slight similar shift in attitudes towards adopting family planning exemplified by such comments from mothers we met as *'I will use family planning because caring for so many children is expensive – I am going to limit to four (using implants) so I can take care properly'* and *'I have spoken with my husband and suggested we only have three or four – he is thinking about it… because of the high costs of school.'*

A reversal of interest in family planning has happened in B3 (project). In 2013, there was a very outgoing and assertive community health nurse posted at the health centre whom everyone knew by name and who was very successful in promoting family planning. But now women complained to us that family planning *'weakened the body,' 'shortens your life,' 'blocks your womb'* and *'makes you barren'* and refuse to take it. Unusually, some men even shared that they would rather use condoms than let their wives bear this burden such is the negative prevalent view of family planning options for women here. We observed very high incidence of teen pregnancies in this village compared to others.

The new nurses posted at this health centre are regarded by people in the village as 'lazy' and do not appear to have the impact that the former community health nurse had.

The uptake of family planning in A3 (comparison) and in A1 (project) (both predominantly Muslim communities) remains very low although there are signs of change. We once again observed many pregnant women and young babies, especially in A3 (comparison). Girls here told us that as soon as they *'develop breasts all they think about is getting married and having children,' 'when you marry what is your use but to give birth? If you don't, people think you are a witch or you eat babies'* (teen girls, A3 (comparison)). They shared that they enjoyed having babies and that the community *'now sees you are an adult.'* The girls also shared that you have to *'compete in giving birth if the man has another wife.'* Others said *'you should give birth to at least seven'* and if the man only has one wife she must *'give him five or seven children.'* Their knowledge of family planning methods has increased over the time we have been visiting but is seen only as a means of birth spacing, not reducing numbers of children. As a roving medicine seller told us here, *'they want family planning to space out their kids… but they still want plenty.'* They often take measures themselves to space, for example, telling us such things as *'we don't enter our husband's room when we have kids under three… that is why they need more than one wife.'* Young women shared that they were concerned that taking family planning measures might lead to *'problems to give birth again.'* However the CHPS male nurse said that men are increasingly coming to the new CHPS (comparison) to ask him about family planning for their wives (never seen as an obligation of men and no condoms are supplied at the health centre *'because nobody ever wanted them'*) although we were asked such things as *'what drugs can I take to have sex with my wife without her getting pregnant?.'*

In A1 (project) young girls we spoke with invariably indicated that they had no say in the number of children they would have ('God's will') and said they were not prepared to use family planning and avoided discussing the issue. The nurse at the CHPS in A1 (project) confirmed that men here were *'totally against family planning'* and described how she had tried to have a public discussion with them but it ended in a *'big argument.'* However, on this visit we found that more woman than we had encountered in previous visits who already had children shared with us sentiments such as *'it is too hard to take care of too many children… we need to go south after planting,' 'so many kids making demands at the same time – I want to take care properly'* and *'it's easier to take care if we have less and can move with one baby on my back.'* Many women said they are using the family planning injections secretly from the CHPS as one young mother shared *'most of us do this but hide it.'* Like A3 (comparison) there is no uptake of condoms and the CHV who used to keep these from MVP still has nearly his entire original stock left.

There is a clear sense that in most communities the approval of husbands is key to changes in family planning behaviour so the availability of family planning methods within the village was often cited by women as enabling them to get 'in secret' (project villages (A1, B3 and B1) and comparisons (A3, B2b).

Attendance at antenatal care (ANC)

Of the 43 recent mothers we chatted with, all except those from the 'far' comparison (A3), attended antenatal clinics regularly. Those from the 'far' comparison indicated that they would attend[15] but could not because they go 'south' (i.e. migrate for work) as soon as they get pregnant, in order to earn money for the baby and only return when the baby is due. This means they have no antenatal clinic records and '*nurses get angry with us'* and refuse to help them locally, referring them instead to Yagba or Walewale.

[15] And some of their mothers had attended in their absence.

In the other five villages (four project and one comparison), even though mothers said they went regularly to ANC (about six times during their pregnancy) few were able to recall much from these sessions but said they felt the nurses would shout at them and not be helpful at the birth if they did not attend. Nurses told us that attendance at ANC was better in the 'near' comparison village (B2b) than other areas they worked in (which includes MVP project areas) and women we met here said strongly that they thought they *'should go.'*

Institution-based births

Following nationwide intention of the Ministry of Health, MVP also promoted institutional births by rehabilitating or constructing maternity units at CHPS, training midwives, providing fill-in midwives, promoting messages via CHWs and CHNs and reducing the role of Traditional Birth Attendants (TBAs).

Giving birth at the health centres has become the norm over the last four and a half years except in the 'far' comparison village (A3) where use of male TBAs is still preferred. We chatted to forty three new mothers[16] and all had had their babies either in the local CHPS or other state hospitals except seven of the eight women from A3 (comparison) and one from B1 (project) who had given birth at home.

In B3 (project) we were told that TBAs '*are banned'* and if a home birth is discovered the CHPS staff will charge the mother GHS 100 before they give them any help if it is subsequently needed. As a result all the births take place at a health centre. Mothers said that they prefer to give birth at the CHPS as the first immunisations for their babies are provided and help with birth registration is provided too. They get discharged after the nurses check that breastfeeding is proceeding satisfactorily (thereby ensuring too that babies get the colostrum).

In A1 (project) everyone indicated that all mothers give birth at the CHPS and some said that the nurses threatened not to help them if anything went wrong if they tried to give birth at home. The old male TBA we met each time we stayed in this village says he never helps with deliveries now unless it is an emergency and he described two he assisted with last year which '*happened too fast'* for him to get them to the CHPS. He rarely needs to refer mothers as he did before as '*they go directly there, even before anything.'* Mothers liked that the CHPS gave them 'drips,' provided vaccinations to their new-borns, were able to register their births and get NHIS and '*they check you well afterwards.'*

In B2a (project), people specially mentioned how helpful it was to have the vaccinations given to their new-borns while still in hospital, especially as village tradition dictates that babies should not be taken out of the house for three to four days. They too noted the convenience of getting birth registration done as '*those born at home often don't have and you need it for school registration and for NGO sponsorship.'* There is a male TBA who still assists with births but only in emergencies and always advises women go to the health centre if they can.

In B1 (project) pregnancy is viewed '*like a disease'* so it is considered a must to go to the health centre where '*they take good care of you and the baby'* (mothers). The nurse in charge said that the Fulani use the maternity services more than any others and estimated that more than 80% of Fulani mothers now use the CHPS and bring their husbands and mothers-in-law who sleep, if necessary on the

[16] All had given birth within the last year.

benches outside the delivery room. There is still an elderly TBA with good relations with the nurses at the CHPS who is part of the Chief's family who helps mothers in the middle of the night. But the CHPS staff say they are aware that the Builsa tradition of keeping pregnancies hidden until consulting a soothsayer as well as costs associated with giving birth in a the health centre mean that some still use the TBA.

In the 'near' comparison B2b, where an NGO-supported Maternal Health and Social Accountability project is active, women told us that the Health Clinic '*does not allow us to give birth at home'* and the nurses who run the antenatal clinic at the primary school '*tell us about the health centre and say they won't see you if you need help if you don't give birth there.'* Although one of the two TBAs who used to assist with births in the village has died the other (male) is still providing services when needed.

In the 'far' comparison A3 people say they prefer home births: '*our mothers used TBAs so we trust them.'* There are three male TBAs whom women like because they are '*on the spot*' and women also leave calling them to the last moment to '*avoid spending money.'* TBAs confirmed this saying that they know they should not help with deliveries now but '*people themselves prefer, call us saying they have tummy pains and then suddenly the baby comes- all because going to the health centre costs money.'* It costs these mothers because the male nurse posted at the new CHPS will only assist births in emergencies otherwise he always refers them to other health centres as they often do not have ANC records (see above). Both the costs of *motorking* transport and the unfamiliarity of the place puts the women off, echoing the same obstacles that women faced in the project villages prior to putting maternity services in place. As noted above, the norm is for these young mothers to be *'in south'* during their pregnancy and they do not build up a relationship with the CHPS staff through antenatal check-ups. The male nurse shared that he gets annoyed that the women return from Accra just before their due date and insists they get ultra-sounds before he will help them thereby putting another obstacle in the way of opting for institutional birth.

Exclusive breastfeeding

MVP intended to promote the exclusive breastfeeding message through the CHWs and CHNs.

More mothers had heard about the importance of giving colostrum to their babies and the common practice of keeping the mothers in hospital or the CHPS until they had breastfed their new-borns contributed to this being done.

Although most mothers we chatted with now seem to be aware of the exclusive breastfeeding[17] message, few actually practice this, often giving their babies water '*because they are thirsty*' and saying things like they had *'given my other babies water and nothing happened so it is ok.'* One teacher with a young baby told us that *'even nurses don't exclusively breastfeed in March and April because babies need water'* (mother, B2b (comparison[18])). We also observed those bathing babies giving them sips of the bath water at bath time, a common practice some mothers told us the nurses at the ANC

MVP intended that through improved ANC and PNC sessions as well as the regular home visits by CHWs, baby hygiene would be improved.

[17] World Health Organisation defines 'Exclusive breastfeeding' as no other food or drink, not even water, except breast milk (including milk expressed or from a wet nurse) for six months of life, but allows the infant to receive ORS, drops and syrups (vitamins, minerals and medicines).

[18] Where the intensive Maternal and Social Accountability project is active.

or in hospital or CHPS had warned them about (e.g. '*they told us in hospital not to leave the baby with mother-in-law who might give them water'* (mother B2a (project)). Others said they gave water because the *'baby cries for it'* but *'not just before going to PNC[19]) as the nurses shake the babies and can tell if they have had water'* (mother, B3). However, we met more mothers who had tried to adhere to exclusive breastfeeding practices and were eager to share how much healthier their babies were. For example, one mother who had returned from Accra to have her baby in B1 (project) said she had exclusively breastfed and *'I only* (first) *gave my baby water after seven months and she had no stomach problems and no running belly.'* Two mothers in B2a (project) shared that their exclusively breastfed babies *'look healthier, don't fall sick… the hospital* [in Fumbisi] *has told us to spread our experience.'* Box 11 describes how a mother even from the least developed village (A3 comparison 'far') is prepared to try exclusive breastfeeding on the advice of doctors from the hospital in Sandema.

Box 11. Hard to exclusively breastfeed

'My' mother has a six-month-old baby and has so far managed not to give her water. She told me she was aware of this message before, hearing things like '*you can kill your baby if you give it water'* but never took any notice with her other six children. This one is special- she had a complication in pregnancy and it cost her a lot to get transport to Sandema hospital. She intends this one to be her last '*after the bad experience I asked the doctor to turn my womb upside down'* and without consulting her husband she agreed that the doctor remove it. At Sandema hospital the doctors and nurses reiterated the message about exclusive breastfeeding and she decided to try this with her '*special and last'* baby. When I arrived to stay with them, the father complained that his wife refused to give their baby water and '*the baby needs water.'* Together we looked at the baby record book and found that the baby would be six months in a just a few days. My mother was delighted with this youngest baby saying the baby is *'giddigiddi'* meaning active, fat and '*does not fall sick.'* She said that *'one breast is for food and the other for water'* which she said explained why the baby was so choosy. *'I tell others but they say their babies need water and will die without.'*

Field notes, comparison village A3

Box 12. Contrasting behaviour of two mothers who live in the same compound

One mother has four children, the youngest of whom is almost exactly the same age (about two years old) as the only child of her cousin who lives in the same compound. The first daughter did not wear clothes the entire four days we stayed with the family, was never bathed and wandered around on her own picking up things from the ground and putting them into her mouth including stones, sticks and discarded plastic bags and sachets she found on the trash heap beside the house. When she needed consoling her grandma put her on her breast as a comforter, but she never washed once in the time we stayed with the family. The other little girl was bathed twice every day, had clean clothes put on her at least three times per day and was told off when she put something in her mouth.

Field notes A1 (project)

Baby hygiene

Even though there seems to be some progress in terms of exclusive breastfeeding practices, we observed no progress in baby hygiene over the four years of the study. Babies faeces was disposed of beside the house usually without mothers washing their hands. Babies and toddlers used dirty mugs to drink from, played with animal faeces and ate soil, sand and caterpillars. Only a few we lived with were bathed regularly with a sharp contrast between those that did and those that didn't. Where

[19] Post-natal clinic referred to by people with the acronym PNC.

mothers bathed their infants this was often once or twice a day though rarely with soap while others never bathed their infants.

Household hygiene and, in particular, baby hygiene practices have not changed in project or comparison households. Utensils and drinking containers get left on the floor and licked by goats, sheep, cats and dogs.

Post-natal care

Post-natal clinics seem to be attended quite well (although we could not observe any of these directly this year) with most mothers saying they continue until the baby is about two years old and health staff confirming this. In the comparison A3 this may be less because the mothers want to return 'south' to earn money when the baby is 9–12 months old.

However, like the ANC sessions mothers can recall little about what they are told and, on the whole, we found they cannot understand the baby record books (not even the illustrations). Often these books are not well preserved and are falling apart. In B3 (project) the CHPS staff say they have been waiting for more than a year for new baby record books which are being re-designed and meanwhile are frustrated that they have to keep notes on bits of paper.

Agriculture

MVP intended to have a number of impacts on agriculture which Itad's causal chain analysis presented as three main streams: (a) infrastructure development and resources provision; (b) information provision and extension; (c) co-operative development. The mishandling of the 'fertiliser for maize' programme in 2013, which was intended to be a *'quick win'* affected trust and participation in subsequent programmes. Generally, we found people we met did not attribute much positive change in agriculture to MVP with the **exception of the tractor programme, which was very much appreciated** by those who benefitted and was often brought up in conversation as something which they now miss. Other project supported agricultural intervention, according to people 'failed' or were so small with small target populations that they did not know about them even when, for example,

we pointed out signage indicating there had been a MVP intervention. However, it is important to remember that the RCA researchers stay with and mostly interact with poorer families which may have been excluded or self-exclude from such programmes.

Tractor services

MVP provided tractors and tractor drivers at fixed rent price per acre for three consecutive years (2014, 2015 and 2016). But only 10 tractors were available to loan and the subsidy amounted to 20% of the market cost.

By far the most talked about and liked MVP programme in agriculture was the tractor services programme. People we chatted with about this in the project villages all noted that the cessation of this programme has been hard and many shared that finding tractors had been their biggest problem this year (2017). People appreciated the MVP fixed price per acre policy and found MVP tractor drivers were trustworthy. Many said they learned how much land they really had after they paid for tractor services and appreciated that they could defer payment until harvest time.
In B1 (project), tractor services was the only MVP agricultural programme they received after the fertiliser debacle in 2013[20] people told us the MVP tractors would work on the chief's land first but they be available for everyone who wanted them and the ploughing was done by June at a rate of GHS 50 per acre (referring to 2016). This year (2017) tractors have been difficult to find (see Box 13) and even though one of our family's daughters living in Accra had sent money specifically for hiring tractors services the family had not been able to hire because of the scarcity.

In B2a (project) people also appreciated the fact that, *'they come at your convenience to get paid'* and they only paid GHS 55 when the market rate was GHS 65 per acre (2016). This community has not suffered as badly as others after the withdrawal of support as they still have plenty of bullocks and ploughs so have reverted to using these and pay their ploughmen by cooking them food. Nevertheless, they worry because the rains are very late this year (2017) and the window for sowing is narrowing. *'Bullocks need rest- you cannot work them more than four days… tractors would be much quicker'* (farmers*).*

In A1 (project) one of our neighbours spent the entire day while we were staying with them (2017) looking for a tractor and eventually tracked one down but had to plough late into the night. Farmers here told us that the MVP rate used to be GHS 45 per acre (2016) and now (2017) they have to pay GHS 55 (although the tractor drivers actually asked for GHS 60).

In B3 (project) the unavailability of tractors was much complained about since *'SADA had gone'* and people told us they had heard other villages were now paying GHS 70 per acre and that tractor drivers were prioritising large landowners. Most had not yet ploughed although it was already July and they usually plant maize by mid-June at the latest. They said that there was a shortage of bullock ploughs here now as people had come to rely on tractors.

In one of the comparison villages (B2b), as they were not part of the MVP programme providing tractors and they have never relied on tractors so continue to have a good number of bullock ploughs owned or available to borrow from neighbours with a small payment or with food and alcohol only (see Case study: 'Comparison village' moving forward by itself in 4. Discussion below).

[20] See, among others, the Baseline RCA report 2013 where people explained that seeds and fertiliser inputs from MVP came too late and yields were very poor making it impossible for farmers to repay the input loans and ultimately suspicion and refusal to be involved in subsequent programmes.

In the other comparison village (A3), farmers were finding access to tractors very difficult this year and also resorting to bullock ploughs. They put the shortage down to poor access due to flooding on the road and that the tractors hired from '*Yagba break down – every acre they complete they break down.'* We wondered if they too were indirectly suffering from the cessation of the MVP tractor scheme as it put more pressure on the remaining tractors available. Others told us that they have used weed killers instead of ploughing like one farmer who explained he used a container of weed killer per acre costing him GHS 15–20 depending where he bought it and shared that this was a lot less expensive than ploughing at GHS 60 '*and I won't need fertilisers as the vegetation is still there rotting.'*

Box 13: Shortage of tractors

'My' father and his neighbours were worried about the shortage of tractors this year. Some said it was because of the change in Government and others because '*SADA is gone.'* It is July and nobody in this area has sown their maize yet. They say they have never sown this late before. 'My' father said he did not know that '*SADA tractors would not be here this year'* and said that he had liked them and that they were *'trusted.'* He spent each day I was with him trying to find a tractor at the market centre. There are very few bullocks in this village which can plough for them so he said he was '*really worried.'*

Field Notes B1 (project)

Tractors have been difficult to find this year (2017) since the MVP programme closed and the drivers are said to be less good than the MVP drivers- as exemplified by this one ploughing unevenly (B1 project (above)).

Some have had to revert to using bullock ploughs-which are less efficient and often entail young boys taking time off school to plough (B2a project (right)).

We spoke to some former MVP tractor drivers who told us some have now got work with a private provider and charge GHS 55/acre but whereas drivers used to be paid GHS 10 per acre they now only get GHS 6 per acre. They said this means they try to plough more quickly and know this means it is not so well done.

Agronomic practice: the rise in agro-chemical use

MVP intended to improve access to agricultural inputs and enhance agronomic practices specifically by helping to hire eight new Agricultural Extension Agents (total 24) and provide motorbikes and fuel stipends, training and basic equipment. They intended to establish farmer groups (15–20 members) and work with 'lead farmers' to set up demonstration plots and share knowledge about improved agronomic and post-harvest practices.

The rise in the use of chemicals in agriculture has been very noticeable over the four-and-a-half years of RCA study. Discarded agro-chemical containers litter the refuse areas and the sides of fields. Varieties of weed killer and pesticides are available at weekly markets and in small provision shops which have been established in this time whereas in 2013 there were no sales of agro-chemicals in the villages. Even at the remote comparison village (A3) we observed active sales of agro-chemicals and the one trader selling weed killer on the day we visited had to return to town in order to replenish his stocks half way through the day such was demand. The remarkable rise in cowpea cultivation which so many of the families we talked with attribute their changed economic status to is, they feel, entirely due to the intensive use of agro-chemicals (see Box 5). As noted above the shortage of tractors has also led some to rely on weed killers instead. These intensive use of agro-chemicals practices which farmers say cut labour costs and increase yields have, farmers told us, been driven by word of mouth and direct experience as well as the quick response to the growing demand by retail outlets for agro-chemicals. None of this activity, according to farmers we met, is due to extension or demonstration programmes. Nobody talked about demonstration plots or on-farm training having happened although there had been some scattered examples of small demonstration plots on previous visits (although which organisation actually ran these was unclear). People could not recall these even when we reminded them and did not feel they had been useful.

None of this rise in the use of agro-chemicals has been accompanied by advice on safe use. We saw farmers diluting the chemicals by guess work; people told us they often mix as many as three different insecticides together to spray at one time *'for convenience'* and spraying without any protection (project villages B1, B3, A1, comparison village B2b). It has become common practice to use *'condemn'*[21] first before ploughing and many now own their own knapsack sprayer (in 2013 this was rare). People said they pick up how to use these chemicals from advice from their neighbours.

[21] A variety of weed killer but also a generic name for weed killers.

These two farmers sprayed alongside each other for ages, children were there too. The man in white complained that evening of his sore red eyes (village B1 project).

'My father was spraying without protection and each evening he complained about headaches and body weakness' (researcher from B2b (comparison).

Agricultural extension

In project villages B1, A3, B3 and comparison B2b, people we met told us that no government agricultural extension agents ever come for any programmes although in B2a (project) a few farmers had been invited to Bolga in 2015 for a training on the use of knapsack sprayers.[22] Where there had been visual evidence of demonstration plots, the farmers we interacted with knew little about them and who sponsored them[23] and they were dismissed as having achieved *nothing.* At the midline, we met a few better off farmers who talked about planting in rows and the possibilities of intercropping but by endline (six months after the project closed) others recalled no positives from project agricultural services apart from tractors. A former Assemblyman said '*SADA was good except for their agricultural programme which achieved nothing at all.'*

Agricultural loans and market support programmes

MVP intended to establish Farmers' cooperatives in each project community and two cooperative officers were hired to support them as a means to channel loans and increasing negotiating power with traders.

There was no talk of any working agricultural loan or insurance programmes in any village (despite probing) although there has been rumours in the 'far' comparison village (A3) of a new insurance

[22] While their knowledge of the sequence for using broad spectrum followed by selective weed killers has been well shared in the village but none of those who had been to training we met used protection.

[23] Signage in English indicated a variety of different implementing agencies, but these plots were all abandoned anyway.

scheme and an Integrated Water and Agricultural Development (IWAD)[24] (a programme of Weinco) project starting in their village this year (2017) which people say will assist in providing inputs for rice farming. People in A1 (project) talked about Weinco programmes they had heard operating in other villages (though it had failed in their village '*because we did not pay back properly'*). People rely on remittance or inputs brought from members of the family working 'down south,' loans from market traders and neighbours and their own cash profits from sale of produce to buy inputs.

Farmers we met[25] did not belong to farmer groups and many shared they actively eschew these as they regard them as time wasting and feel they cannot trust those in charge. Our conversations suggest people prefer to work as family units and make their own decisions rather than being bound to rules and regulations of the group. Box 14 describes how a women's co-operative (established by MVP) has been reduced to a savings group (which the remaining women members appreciate) but is not effective in collective bargaining. Box 15 describes a Government intervention intended to improve market linkages (something MVP had intended to do) which failed largely because the programme was rushed and externally facilitated.

Box 15: Farmers avoid being locked into contracts

A large scale Government sponsored programme operating in the study area in 2015 designed to link small farmers to assured markets was swiftly closed after an independent evaluation showed that farmers simply did not accept the terms and conditions of the arrangements.

We interacted with a former field officer who described how he had been required to form groups from existing groups and explain the programme to them. Linkages were supposed to be made to markets for shea nuts, tomatoes, peppers, baobab and cabbage, all identified as potentially having lucrative export markets. The approach involved brokering contracts between these groups and the buyers who would contractually agree to purchase certain quantities at fixed rates and were given incentives to do this. Groups were required to open bank accounts so payment could be made this way.

Several problems emerged early on. Farmers did not want to sign the contracts because they did not see how they could ensure that the buyers would honour them and felt there was no means of redress. Even when offered a police enforced contract, they refused as they did not trust this either and felt that they could still be exploited. Groups which had no agricultural expertise lobbied for inclusion in the project to benefit from the incentives. Buyers used their incentives to search for produce at prices lower than those specified in the contracts with groups and so, as speculated by farmers, did not honour their contracts with the groups.

The failure can be attributed to a number of factors: (i) mistrust among group members because the group was put together by outsiders; (ii) rushing a process which required the gradual establishment of trust; (iii) using perverse incentives to force relationships which actually needed personal networks, time and trust. In short, it is difficult to facilitate a process-oriented behaviour change programme from outside in a short time.

From researcher discussions in sense making workshop, based on programme in B2a (project)

[24] IWAD Ghana Ltd is a private company incorporated in 2014 within the Weinco group of companies, focusing on expansion of commercial farming.

[25] By design the poorer farmers, but also likely to be excluded or self-exclude from project benefits.

Box 14: The MVP women's centre

They told me the building was completed in 2016. The sign reads 'Cooperative Office' in English but everyone refers to it as 'SADA women's office.' It is a cement building with zinc roof and a walled yard outside. I am told that really the only use it has is for *'susu'* (savings) group weekly meetings and three groups are said to meet here on different days early in the morning. 'My' mother and her friend have left the group because they were told not to share anything that went on in meetings with their husbands. They did not like that secrecy and asked for their savings back and left. Others said they still attended but some disliked the fines for being late or missing a meeting ('*what if your child is sick?'* they said).

There are currently five bags of shea nuts stacked at one end of the otherwise empty building which I was told have been bought by a trader who will return to pick them up. But even regular savings groups members are not keen to join this way of trading. The village is not far from Fumbisi and they regularly go there for their own needs so would rather carry their shea nuts there themselves or get their husbands to take by motorbike and chance their luck at getting a better price. They feel they have a choice of whom they can sell to in the Fumbisi market and said they can get GHS 16–18 per basin rather than the GHS 15 paid by the trader who came to them. There was a general sense that those who come to buy from the women's centre *'will cheat us.'*

Field notes, B2a (project)

Savings programmes (Village Savings and Loans Associations (VSLAs))

MVP is one of several organisations that assist women (in particular) with VSLA. VSLA is simply a more formalised version of '*susu'* groups which have been operating for generations in Ghana. People we met always refer to the groups as *'susu'* groups. Some women we chatted with noted their membership of *'susu'* groups as a key change for them in the last few years. Groups in B3 (project), especially five former MVP groups, thrive and continue to meet, '*follow the rules'* and enjoy benefits after MVP withdrew support in 2016. For example, one of 'our' mothers (42) shared how it was invaluable as she was able to save about GHS 620 towards fees for her 19 year old son to go to senior high school and hopes to borrow the rest without interest. They told us that only those who were interested joined the groups and that a sixth group has formed following the MVP model.

Although one group is on the brink of dissolution in A1 (project) because there was no leadership planning and another five are struggling, one *susu* group remains active and comprises thirty women with a literate male secretary. A member explained that it is '*very helpful because you can borrow money when you need it and we share the money out at the end of the year'* and others said this is particularly important for funeral costs.

Savings groups continue in B2a (project) and work because '*we find it difficult to save on our own'* and appreciate the opportunity to borrow small amounts with very little interest.

MVP intended to establish 50 VSLA, partly as a means to save money for agricultural inputs and partly towards their women's empowerment objectives.

During the study sense-making workshop, we examined why some *susu* groups worked and others did not by comparing the two (see Table 6). It seems literacy and leadership are key so that they can function independently but it does suggest that the *susu* groups in the more developed B3 (project) serve women who are much less deprived.

Table 6: Comparing MVP VSLA interventions

Why one VSLA works and the other doesn't	
B3 (project)	A3 (project)
Well facilitated from the start through regular visits by a male facilitator	Less early visits by outside facilitator
Somewhat educated members (including a teacher who is the secretary)	Members never went to school so all illiterate farmers
Mixed ages	All over 35
Leadership, rules and regulations strong, endorsed and shared	Fully dependent on the leader, so when she left to live in town, the group was bereft, currently looking for a JHS girl student to help them with their record keeping
Prestigious to be a member and healthy rivalry between groups	Only one functional group in the community so no mutual support or healthy competition

New crops and market development

Following commissioned reviews of value-chains, MVP identified mango, maize, millet and acacia as promising new crops and farmers were given saplings and training to grow them.

Researchers observed that nearly all the mango saplings which had been planted by MVP in project villages they lived in had died. People told it was because nobody looked after them. The efforts to increase maize production were severely impacted by the mishandling of the programme at the start of MVP programme. People told us they do not want to grow millet anymore because it is a relatively labour-intensive crop, especially close to harvest time where birds are a major problem. Furthermore, it inhibited the opportunity to grow the more profitable cowpeas as it has a longer season than maize. We came across one acacia plantation in a project village which has been abandoned as '*people did not take care of the young trees and they died without water.'*

Agricultural infrastructure development

MVP intended to train farmers on proper home storage of crops and to rehabilitate warehouses for storage.

None of the farming families we met used improved warehouse facilities and shared that they prefer to keep their crops at home. This is because they do not trust collective storage and worry that their crops will be taken or adulterated. It is also because they prefer to be able to dip into their own home stored stocks when needed, sometimes in small amounts: for emergencies, for obligatory contributions to social events (weddings, funerals), for their own consumption and feeding relatives who visit and prefer the convenience of anytime access. Women specially shared that they like to keep the stocks at home '*where we can see them,'* partly because they say they don't always trust their husbands not to sell it without their knowing but also because they can dip into the stocks when food is short or when they have small cash purchases they want to make.

As noted above, most families and their neighbours indicated that they '*never saw any extension agents'* and had received no training on improved post-harvest practices. In fact we noted an increase in adding (highly toxic) agro-chemicals to stored seeds (for example, see Box 6).

Livestock production

MVP intentions in livestock production were unclear and early programmes to identify and train village vets and to provide livestock through asset transfer programmes were apparently abandoned early on. However, livestock asset accumulation may be one way to measure increased economic prosperity.

More than half of our RCA study families across project and comparison villages have added to their livestock numbers in the last two years, especially goats but also a few sheep and our observations suggest that this is indicative of other families in the village. More generally, villages seemed to have very large numbers of roaming small livestock (goats and sheep). Goats are preferred to sheep as people worry that sheep go off in flocks and are easy to steal. People told us that buying these small ruminants was a form of savings, '*for emergencies'* (people in B1 project). Many with Fulani living nearby entrusted the care of these animals to them and asked their advice when animals were ill.

This significant change in small livestock ownership was not attributed to any outside programme or change in markets but rather reflects an increase in disposable income mostly from cowpea cultivation. This conclusion is reinforced by the fact that those of 'our' families who had suffered poor cowpea harvests either did not have small livestock at all or had reduced numbers.

Similarly, chicken numbers, but especially guinea fowl numbers, have significantly increased since 2013 across all the villages (project and comparison) and again less so or not at all among those who did not get good cowpea harvests.

Apart from Fulani people, the ownership of cows and bullocks has decreased significantly over the years of the study as has the ownership of donkeys, presumably because of the increase in tractors, *motorkings* and motorbikes. Only in areas where tractors have never been easy to access are there anything like the numbers of bullocks that there used to be. In A1 (project) where donkeys were plenty in 2013, we saw only one in 2017. People also shared that buying a cow was more risky than small animals because if it got stolen this was a bigger loss than a sheep or goat and these days '*we would rather buy stuff for ourselves'* (such as TVs and bicycles).

A few people talked about asset transfer programmes where people were given sheep or goats but said this was only ever done on a very small scale and '*most of the animals died'* (B2b (comparison) and A1 (project) and it was difficult to attribute these programmes although some said they were MVP. For example, in A1 (project) people shared that MVP had provided goats in 2015 but these had all died and the '*programme stopped.'* Others said that only the elders were given these and other deserving people were excluded. But people also shared that animals given like this were often a problem for the recipients to manage as people had no time and had to buy additional feed. In B2b (comparison) people only pointed to the same one person who had benefited from such a programme. Vet services continue to be unsatisfactory but people told us they accept that '*some* (animals) *will die'* and *'if God blesses they will survive and this is fine but if otherwise they die'* (father, B1 project). Some said '*we give them paracetamol'* or buy other medicines (intended for human consumption) from the roving medicine sellers. People say they do not trust 'para-vets' and shared experiences of animals dying after vaccinations. For example, people in B2a (project) told us '*the chickens were healthy and*

then they (community vets) *vaccinated them and they all died… We think they mixed water with the drug to make more profit*'(neighbour mother). Some shared that they avoid the problem by trying to sell their livestock and fowls '*before disease season'* or consume them themselves if they become sick.

Changes in migration patterns resulting from improved agriculture

Implicit in the MVP programme is the assumption that as agricultural production improves as a result of their intervention, domestic migration, especially seasonal migration (regarded as a coping strategy) would reduce.

The RCA finds that people shared and we observed that in all study locations except comparison A3 a reduction in seasonal migration (especially among men) but this is nothing to do with MVP interventions. Rather, the phenomenal rise in cowpea production has had a major influence on seasonal migration with the traditional migration 'south' basically ceasing in villages B1(project) and B3 (project). In B1 (project) people shared that they are involved with agriculture now from June to March and then use the remaining months between March and June to fish so they have sources of livelihood throughout the year.

In the comparison village B2b since the rehabilitation of the dam has been completed people are also saying that they no longer seek dry season work as they are able to grow vegetables at the dam.
Where there is less opportunity for growing cowpeas people continue to migrate for seasonal employment. For example, men from A3 (comparison) may still seek seasonal weeding work and see it as *'essential and only way to make cash so I can expand my agriculture.'* Sons in one of our families in A3 (comparison) were constantly on the phone searching for work in Brong Ahafo '*because the rains are late… we can get good money in a short time there'* (about GHS 80 for two days work, they say) and those from B2a (project) which has benefitted less from cowpea production (which requires closeness to rivers) also still seek dry season work (December–May) sometimes on cocoa plantations.

Migration of young women has increased in A1 (project) and A3 (comparison) becoming a norm. In A3 (comparison) people shared that *'100% of girls go kayaye'*[26] and '*very soon the whole world will go to Accra.'* Girls told us they see no point in education as their main aim is to get married and have children, so '*going south'* for work is important signifying they are adults and travelling gives them status. They shared how it was possible to learn a new language, '*have nice dresses and fancy phones.'* Parents actively encourage this migration for work *'but don't punish us if we don't want to go.'* The young women told us they prefer to go to Koforidia these days as it is getting harder to get work in Accra but is it easy to get '*sales person work, making corn dough or grinding ground nut paste work… and they pay daily'* which they say is preferable to unpredictable *kayaye* work.

In A1 (project) young women go 'south' to work in *kayaye*, as sales persons in stores and on food stalls but tell us they like the work as sales persons best.

Young women from B2a (project) also prefer Koforidia and often take work as dishwashers. Women do this work primarily to buy household utensils and equipment. Where young women go for seasonal work this is very much encouraged by their families and typically takes place immediately after marriage when they are often pregnant and '*preparing for the baby'* and then will be undertaken again when the baby is a year old (often when the mother is pregnant with the second one). As mentioned

[26] *Kayaye* (literally woman with load in Hausa) is the name given to (generally young) women who migrate to southern markets (often Accra and Kumasi) to provide head portering services.

in the section on maternal health this practice make it very difficult for women to participate in antenatal programmes.

Education

Education facilities

MVP main investment in education was construction, rehabilitation and furnishing of primary school facilities.

The MVP response to school facilities upgrading priorities can be summed up by a quote from a school principal in 2013 who was at the time compiling a list of needs for MVP to address: '*they don't' ask us what we want, they give us what they have.'* MVP funded new and rehabilitated classrooms and teachers' quarters had mostly been completed by our last visit in 2015. Table 7 lists the problems teachers and others felt they had in 2013 and how these have been addressed.

Students have to repair their own desks before school starts at a MVP funded school such is the poor quality of workmanship on the furniture which is less than two years old.

Table 7: How problems at schools which the community and teachers identified as priorities were addressed by MVP and others

	Location		Problems identified in 2013	Problem addressed?
Most developed	B3 project	Primary school MVP 2014	Full complement of teachers but only 3/14 fully qualified graduate teachers	Thirteen teachers of whom eleven are graduates
			Inactive PTA	Slightly more active
			Insufficient teacher accommodation	New eight rooms for teachers, importantly with electricity
			Furniture in poor condition	Enough furniture but poorly maintained
			Toilets	Installed and somewhat used
	B2b comparison	School (community)	Community school building only just started	Construction still in progress
			Only three teachers	5/9 teachers are graduates plus four NYEP teachers.
			No water	New boreholes constructed by a local NGO and from donation from Church in USA.
			No toilets	GPEG funded toilet block but not used
	A1 project	School (MVP)	Shortage of teachers only 1/5 graduate teachers for primary and JHS	Total of 14 teachers – mostly graduate teachers
			Insufficient classrooms and no functioning KG	Construction of three new classrooms,
			Broken furniture/insufficient furniture (head noted as priority in 2013)	Some new furniture supplied. Poor quality so much broken and piled in store room
			Non-functional rain water tanks for teachers quarters (never connected & later blew down in storm 2015 so leak)	Teachers have given up- get students to fetch borehole water for them.' *we expect who ever built it to fix it but the water tanks were never fixed'*
			Water supply (Head mentioned as priority in 2013)	SADA supplied borehole often short of water, World Vision tried to fix it but '*it is still not good*'.
			Old unused toilet blocks	New blocks but unused
			Non-functioning PTA	Still non functioning
	B1 project	School (MVP)	No borehole	Borehole installed by 2015 but 'smelly' and abandoned
			No toilets	New toilet block in use but no water for hand washing
			Few teachers and teacher absenteeism because of poor accommodation	4/6 teachers are graduates plus two NYEP . No electricity in the teachers accommodation so only two live in, absenteeism still high
			Only to P3	Classes to P6 but three held under tree as new classroom yet to be handed over
least developed	B2a project	School (MVP)	4/10 teachers volunteer, no teachers for KG	Newly posted graduates and NYEP teachers but four on maternity leave so effectively only 10 teachers
			High teacher absenteeism attributed to no teachers quarters	No action, all teachers come to school by motorbike- high levels of absenteeism still
			Non-functioning PTA	Now meets but predominantly women and are not proactive but rather meet only when teachers call them e.g. to tell them about exam fees

			No electricity	Solar power was installed but stolen and no electricity at school
	A3 comparison	School (Member of Parliament (MP))	Very poor condition former NGO school/abandoned new block	New classrooms (more than needed) but poorly furnished – children sit on the floor on shards of broken furniture
			Very poor teachers quarters built by community – few teachers (4) and high absenteeism	7 graduate teachers but two have since left because of living conditions. Quarters have new zinc roof but no electricity. Two teachers use the new classroom block to sleep in.
			No toilets	Two blocks built by two different NGOs with hand washing facilities but not used.

School going

MVP intended to address low school attendance through a number of interventions including training teachers on teaching methods and improving the learning environment. It also recognised that poor attendance by teachers was to some extent due to the lack of suitable teacher accommodation and that the overall lack of teachers was also an impediment to children going to school so filled teacher positions with trained community education workers, originally intended to spearhead community sensitisation work and encourage children in/back in to school. MVP provided incentives to needy children, especially girls such as uniforms, bags, shoes and books and ensured that school-feeding programmes were operational.

For the first time we felt that parents and youths were more ambivalent about education this year than they had been in previous visits in 2013 and 2015. While before people saw a future in getting at least one child well educated, some parents now shared that they felt they had wasted their money on education or that there were better opportunities to earn in the village than there had been before, especially in villages experiencing good cowpea production or the 'near' comparison village (B2b) which benefits from proximity to the newly rehabilitated dam. For example, parents we stayed with (in B1 project), like others we chatted with, shared their disappointment with their daughter who at 17 had gone away to Junior High School (JHS) but had not graduated and now had a baby *'I am not happy that I invested so much and got nothing… she has not even visited since having the baby'* (father). As a result he has lost interest in his son's (11) education and encourages him to help in the farm but thinks that the new cowpeas and fishing opportunities means he can be '*more relaxed about schooling.'* Similarly another father we stayed with in B1 (project) was frustrated that his 18 year old left school at in Primary 4 (P4) but has now come to terms with it as '*cowpeas gives good returns'* and the boy himself has aspirations to cultivate 60 acres. His neighbours also said they were less keen for their teenage children to continue in school- there is no JHS in the village and so they will have to rent rooms if they went away to school so question the value and feel the boys can farm and fish together in the future. In A1 (project) mothers shared that they felt schooling, especially to senior high level, was good but nevertheless worried more than before about it being a waste of money *'if they just come back and farm and have kids.'* Another neighbour father in B2a (project) shared that his sons have left school to '*farm and take care of the family'* as costs of Senior High School (SHS) were too high '*I hope the government considers giving this for free.'*

In comparison village A3, parents shared that although they want their children to be educated, the school is poor quality and their children '*just want to go down south to earn for themselves – the boys so they can decorate their rooms and the girls to buy clothes and utensils for their marriage'* and *' I want my children to be like you (*the researcher*) but I can't force them to do something they don't want to do and then they come back home bringing shame to the family* (Father). In B2b (comparison), parents shared that senior education was costly and that the children made excessive demands whenever they came home from school. Another family we stayed with (in B2b) were also really disappointed with his three eldest children who had all dropped out of JHS and SHS, two girls because they were pregnant and a boy who simply lost interest and does not have a good job so doesn't help him out: *'I have just wasted my money';* he intends to invest in livestock instead. Another neighbour father in B2a shared that his sons have left school to '*farm and take care of the family'* as costs of SHS were too high: '*I hope the government considers giving this for free.'*

Others reasons for de-motivation

(1) Teachers' behaviour (especially corporal punishment and making students do their chores)

Some parents' growing disenchantment with education is echoed by children too. For example, whereas in 2015 most children were going to school from the area one researcher lived in in A1 (project), now there are very few. This is actually contrary to parents' wishes ('*I didn't want her to end up like me in the village')* and others who want them to go to school but cannot get them to go. While drop-out is common among teenagers especially where they are struggling or are old for grade, there seem to be a number of reasons why even much younger children are dropping out, especially because

New graduate teachers in A3 sleep in the new classrooms.

Teachers in A3 expected students to do chores for them, like washing their motorbikes.

of corporal punishment, bullying and not making any progress. For example, in comparison village A3 the teachers we chatted with seemed unmotivated (especially as their living conditions were poor without electricity and some had not received their salaries for as much as ten months) and blamed the children for poor quality telling us '*they kids here are not bright- they learn today and forget tomorrow.'* Children here told us that they were asked to do chores for the teachers including cleaning their motorbikes and collecting medicines and were '*often caned*' and children who were not school-going shared that their friends who go to school *'get beaten a lot.'* Children in A1 (project) also spoke of having to go to the farm to help teachers and being caned. In project village B1 (project) children told us that teachers frequently *'beat us… and they don't teach us'* and, tellingly, a daughter (9) in one of the homes we stayed in wants *'to be a teacher so I can cane students.'* A daughter (13) of one of the families we stayed with shared that, '*I left school and help with farming – it was my choice and I am happier than going to school where they beat me.'* Teachers in B1 (project) told us that they '*have to cane'* the children to maintain discipline, especially those who have to have classes under the tree (as there remains a chronic shortage of classrooms here) as '*they lose attention… But when parents complain we have nothing to do but just have to let the children wander around.'* The beatings which were reported as common in the primary school in B2a (project) in 2015 continue but students told us that teachers also insist that they help on their personal farms without any remuneration and, worse, punish if they help themselves to the odd ground nut. As they have to do this work for the teachers each morning, they said they are often tired and sleep in class.

In B3 (project), people worried about the single male teachers accommodated in the new MVP quarters as '*they get the school girls to wash for them, fetch water and cook'* and there were concerns that the favours did not stop there. Here teachers shared that they should not be using the cane but parents complained to us that this was still happening though children said it was more common to be punished in other ways such as being required to sit on the floor or kneel in the yard '*which offends us but is better than caning.'* Teachers said: *'students are stubborn and intentionally break rules.'*

We happened to visit one project[27] area school where the JHS prefects were being briefed that day in the principal's office on how to use the cane to keep discipline among their fellow JHS and primary school students. Here all the teachers, which included young fresh graduates, carried sticks and one new graduate teacher from Kumasi shared, *'we have to carry canes as these children do not know how to behave – they get nothing from home.'*

The only school where nobody talked about being caned was the near comparison school (B2b). Observations of classes in this school found a friendly and engaged environment which we had first noted in 2015. Unlike the other schools, children here behaved and were attentive (see photo below).

(2) Bullying

The Fulani families we chatted with in A1 (project) and B1 (project) shared that they do not send their children to the state schools because of bullying. They told us that they are motivated for their children's education and have aspirations for them but have to protect them from this. In B1 (project), the Fulani children were enrolled previously but '*they pretended to go to school and hid'* and now families have acknowledged it is too difficult for them. In A1 (project) teachers laughed when we asked if the Fulani children came to school. In B3 we did not interact directly with Fulani but observations and chats with school teachers indicated that there are only a few Fulani children at both the primary school and JHS.

(3) Little teaching contact time

On normal school days we observed very short contact times in both project and comparison villages, with schools starting late and finishing early but also punctuated by several very long breaks of more

[27] Location withheld for confidentiality reasons.

than 30 minutes each throughout the day. Where UNICEF[28] has introduced the new pilot tablet based monitoring of teacher punctuality, classes started on time but finishing early and excessive breaks throughout the school day continued. We were often in the communities on Friday and observed in all cases that school comprised of little more than somewhat un-supervised sports (for boys while girls watched and cheered, rarely participating) and closed early so that teachers could return home or visit family at the weekend.

In project village B1, we were told that because the teachers' quarters do not have electricity only two teachers actually reside in the village and as noted above, others are frequently late and absent when it rains. In B2a (project) none of the teachers live in the village because of its proximity to Fumbisi and their preference to live there. Children told us, '*teachers do not come to school- sometimes we only play and come back.'* Others told us that when the teachers do come they usually leave early and often '*just take the register and go back to town by 9:30am*' where, people say they run their own businesses including provision shops. Apparently some parents have been selected to monitor the teachers but '*it is not happening.'*

In A3 (comparison) where teacher absenteeism has always been a problem parents continue to lament that '*there are no teachers in school so what is the point of the children going?*' and children share this view '*teachers are never there, never encourage the kids so it is time wasting – we may as well come to the field*' (girl, 12, who has never been to school). Here the teacher accommodation is very poor and there is no electricity, people say *'teachers go home to their families and a whole week can pass without them returning.'*

(4) Teachers not able to speak local languages

Another issue that has emerged since 2015 and has affected school-going is the increase in teachers posted to the schools who do not speak the local languages and can only conduct lessons in English. In B3 (project), four new JHS teachers do not speak the local language, Buili. We witnessed difficulties when one was trying to intervene in a student fight and had to ask for others to help with translation. Students we chatted with had great difficulty understanding when we spoke in English and it was clear that they cannot follow lessons conducted in English. The primary school teachers here use Buili in lessons so that those in Primary class 4 have almost no understanding of English and yet will be expected to follow lessons in English entirely in two years' time.

In village A1 (project) four of the new graduate teachers only speak English. Talking with some of these they said '*it had been very difficult at first'* and maintaining discipline was a particular challenge. We met children here who has previously been enthusiastic about school but now were less so or who had become irregular because '*we cannot follow class.'*

In A3 (comparison) the primary class 1 teacher can only speak English and the children can only speak the local language, Mampruli (he has left recently to claim the non-payment of salary in Accra and people speculate he will not return anyway) Another is trained to teach Information and Communication Technology (ICT) at JHS level but has been posted to teach Primary class 6 He does not know the local language, Mampruli, and teaches only in English.

(5) Rationalisation of classroom size

[28] UNICEF, in collaboration with the Ghana Education Service, has introduced a Mobile School Report Card scheme using tablets aimed at improving data collection and performance of teachers in selected basic schools.

Yet another concerning issue has resulted from the 'rationalisation of classroom sizes' which teachers told us was initiated by MVP in the middle of 2016. In one project village[29] school two teachers told the same story at different times. One shared that, *'The NGO (SADA) people told us to reorganise all the classes putting the children who were old for their grade in the right class. We teachers protested and the Head complained but we were told we had to do this – it was an instruction.'* He explained that this had caused a great deal of problems for the teachers as children who were not ready for higher classes were thrust into them. Another teacher said at another time, *'SADA missed its targets and before the school year changed all the classes – sorting them by age rather than performance. So we had to create a new class in JHS 1 which we called 'new' where we put all the students from P3 (primary class 3) upwards who were older but still could not read.'* The teachers did not agree with this instruction but it was, they said, all done at the district level and they felt that some students had definitely left school as a result as they could not cope when put into classes above their capability. *'They don't think of the children,'* one said. They further explained that MVP had provided funds for extra tuition for these children but as children in this village *'always come back to school after holidays at least three weeks late we only had about six weeks' worth of extra lessons – it is impossible to bring their education level up in that time.'* We met children who told us they had been 'jumped.' One girl said *'some were jumped. I was jumped from P4 to P5 (Primary class 4 to primary class 5) but refused as I would not be able to keep up.'* But others said that when they and their friends were 'jumped' some dropped out. *'Five girl classmates got married (they were 12 years old) and some boys went down south.'* They said teachers did nothing about this and the CHPS nurse confirmed that some 12 year olds had had babies recently.

Teachers at the primary school in B3 (project) said they had been instructed at the end of academic year 2015–16 to split primary class 6 into classes so each would be under 44 students per class but had no increase in teaching staff to manage this. Teachers here said, *'before SADA left they identified all those of teenage years who were in lower classes and jumped them to P6 … we now have P6 a and P6b.'*

[29] Identity of village withheld for confidentiality reasons.

Going to school in a wet uniform as he only has one set.

Incentive programmes

The numerous school incentive programmes[30] such as distribution of uniforms, bags, shoes and exercise books, including those undertaken by MVP, have mostly stopped (in 2015 soon after the last RCA study). Rarely did parents of students suggest that this could be a problem. Only teachers shared that this could become a future problem (as uniforms wore out, for example). There were a few cases such as a neighbour's girl (B1 project) who wants to return to school but does not have a uniform and could not borrow from her younger school-going sibling as it *'was torn.'* She said she would feel uncomfortable without a uniform. In B3 (project) people told us that they will have to buy material for uniforms and get them made in Fumbisi now they do not get them free from MVP. They estimated the cost would be GHS 35 but did not say this would prevent them going to school. Conversely, in A3 (comparison) the distribution of uniforms during election times did not encourage them to go to school.

Play equipment

MVP provided playground equipment and sports equipment primarily with the intention of making the school environment more appealing and attractive to increase school going.

[30] Reported in the midline RCA report included CAMFED, GPEG, GPAS as well as MVP.

All the play equipment (swings, see-saws, slides) provided through MVP at primary schools in project villages which we had observed to be in poor condition in 2015 has been fenced, people tell us using the schools' Capitation grants. Our observations indicate that this had been a requirement across all schools) with such play areas. People explained that the broken equipment had often resulted from unsupervised use and older children using out of school time (nobody suggested the equipment might not have been well made). Fencing was not completely successful as fences had been breached but had also limited access excessively in some cases. So, for example, the play area is not used at all in one school, is used only '*for one hour on a Friday*' in others. Old (and hazardous) play equipment had not been removed from these enclosures in some places. Siting these play areas under fruit trees, especially shea nut and mango, had been a mistake, people shared, as people throw stones and sticks to dislodge the fruit and climb the fences to retrieve the fallen fruit.

The play equipment, like in other villages, was placed under a fruit tree for shade- but the wisdom of this is questioned when the play area becomes unusable because people throw sticks and stones to bring down, in this case, shea nuts. Also in this photo can be seen broken equipment which was never removed from the enclosed area (A1 project).

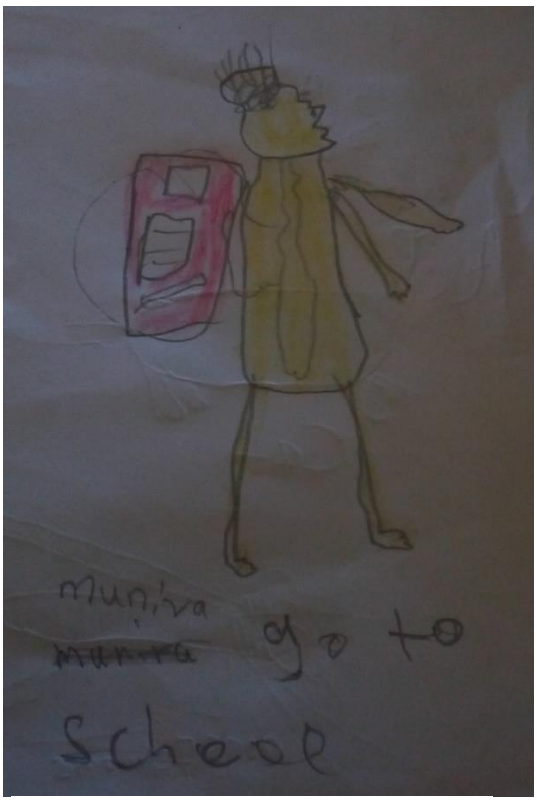
School feeding

MVP supported the Ghana School Feeding Programme by ensuring that this was operational in each of the project primary schools and regarded this as an important motivator to encourage children to attend school.

School feeding programmes only operate in the four project village state primary schools (A1, B1, B3 and B2a) and not in the comparison schools despite wider coverage intentions of the Ghana School Feeding Programme suggesting MVP did have an influence on this provision. From 2013, primary school children received a hot meal in the middle of the day in the primary schools in these four

schools although there were no kitchen facilities at B1 and the roof of the kitchen in B2a was in poor condition.

The school in the 'near' comparison (B2b) was founded through community initiative in 2013 and was not fully recognised by Government while the school in 'far' comparison (A3) was formerly run by an NGO and was in a very bad state as it transitioned to Government status at that time. Neither comparison primary schools had feeding programmes when we visited in 2013 and 2015 and still do not. The school in B2b (about 140 students) has never had a problem with enrolment and attendance and the teachers recommend a feeding programme only because the children *'are tired by mid-day because they come without breakfast'* (primary school head) and not as a means to attract students.



This drawing is by a 13-year-old girl in Primary class 4 and illustrates weak education outcomes (B3 project).

At the primary school in B2a (project), parents felt that the amount of food the children get is small but children themselves did not say this. Here children in Primary classes 2–6 are required to bring firewood each week for the school feeding programme. They have one cook paid by the caterer who provides *kenke* (maize balls), rice and beans for all the primary school children (262) as well as many of their younger siblings, '*especially when their parents have to go to the farm.'* In the primary school at A1 (project), there are two new cooks as the previous one gave up after as she complained she was rarely paid. As we chatted to them as they were preparing the food they shared that they too have not been paid for three months (and are owed GHS 150 each) and are also contemplating packing it in. They told us that the caterer claims the government has not paid her and when they complained to the school principal she said there was nothing she could do to help. '*We could go south and earn GHS 100 per week, why stay here for no money?'* shared these two cooks. The smoky and hot conditions they were preparing the food in were unbearable. Children got their 'favourite' the day we were there of *jolof* rice and they all left for home immediately afterwards (about 11am, but it was a Friday and only two teachers were there (see box) but as seems to be a norm as one mother shared, '*the children go to school in the morning and after lunch run home'*). As before teachers told us that parents often just want their children to be fed, especially as this is a busy season (shea nut picking and planting). In B1 (project) the same caterer still managed the school feeding programme as before and supplies are said to be more regular. Families shared that they liked the programme '*because we can go to the farm and know the children are fed*' and all children get fed including ones too young to attend school yet. In B3 (project) the cooks, like A1 (project) complained bitterly about the delay in wages and that they only got GHS 150 at the end of term. They said that food supplies come on time and is sufficient these days and confirmed that, as in other areas, younger pre-school children come to eat too.

Quality of education

We were struck by the poor quality of learning in the primary schools. So for example a nine year old who has been attending school for four years and is still in Primary class 1 cannot yet write simple

numbers (B1 project) and another 11 year old in Primary class 4 can only say *'my name is…'* in English (B2a project). Parents in B2a (project) shared that they did not think the '*teachers teach well.'* We were also told that children were specially selected to take the Primary class 3 tests undertaken by the MVP evaluation and met a number of children who said they were not '*bright enough to take these tests'* and so were not selected by teachers to sit them. Although less scared of trying to draw pictures when we offered pencils and paper than they were in 2013, children drew standard (learned) pictures and liked to copy from each other.

Teachers often shared that they felt they had enough resources but referred to the minimum of textbooks and chalk and said it *'was better than before'* but our observations suggested that they managed with very few teaching and learning resources.

Not a single school had pictures on the wall or other visual aids and only the 'near' comparison school in B2b actively used some of the teaching aids provided separately by USAID and UNICEF. Computer laboratories were not used as much as intended, either because teachers found it difficult to manage few resources among the large numbers in their classes, because computers were not working or because there were no teachers available with the skills to teach computer classes. Children mostly told us they very rarely used the computers and that these classes were not particularly fun, comprising of identifying parts of a computer and drawing pictures of computers.

Issues of maintenance in the new physical facilities

MVP intended to address the issue of maintenance through lobbying of the District Assembly for school and road repairs.

The most observable issue with all infrastructure and equipment provided through external programmes is that of maintenance, irrespective of the donor. The expectation for the donor to fix problems or for Government to repair buildings and equipment is pervasive and while obviously an issue with MVP interventions, this problem is not confined to these. The following table provides insights into current maintenance issues.

Table 8: Maintenance issues

		Problem now (2017)	Action being taken
B3 project	Primary school MVP 2013	Non-functioning borehole (1 year)	Say MVP did not repair because '*packing up'* and now they have *'no funds to repair.'* Have asked PTA and outside donors but no response
		Broken furniture	Relaxed about this *'we have lots in store so we can replace'*
		Windows broken	Waiting '*for up'* (Government)
		Solar panel and battery for computers stolen (2015)	Said to be stolen by *the 'lazy youth in the village'* but nothing done about this
		Two computers (out of 6) not working (3 missing)	Waiting for 'office' to repair
		No locks on classrooms	*'We complain to the office and they don't do anything'*
	CHPS MVP 2013	Delivery bed brace broken	Nurses unconcerned about this
		Delivery room roof leaks	Waiting on Government
		Solar panel on borehole not working	Waiting on Government
		Window frames rotting	Waiting on Government
		Ambulance (based at Fumbisi) broken, Motorking broken and missing	No hope for action
		New incinerator not used because rain has washed sand in front of the gate	Burn rubbish beside the unused incinerator
		Borehole broken	CHV trying to raise GHS 5 from households to repair
B2b comparison	School (community)	School building unfinished	Construction still in progress but maintenance issues managed when they arise
		Borehole not working in 2015	Collected money from households and contracted someone to mend
A1 project	School (MVP)	New ceiling fans for KG not working	Waiting on Government
		Broken furniture	Piled in store room
		Broken gates	Prop shut with broken furniture
		Non-functional water tanks for teachers quarters (never connected)	Teachers have given up- get students to fetch borehole water for them
	CHPS (MVP)	Leaking roof (2016 storms)	'*Unfortunately our SADA is not there'* (nurse)

	Main road	Culverts collapsed, pot holes, parts of road washed away (heavy illegal timber trucks use the road)	MP offered to repair but District Assembly blocked this
B1 project	School (MVP)	Hinges off toilet doors	No action
		Water tank never completed to catch rain water	Abandoned
		New bore-hole 'doesn't work' and other abandoned because 'water smells'	Use borehole at Health Centre
		Solar panel battery stolen	MVP removed the solar panel
	CHPS (MVP)	Motorking not working	Have been told to use 'internally generated funds' but since they do not have their own bank account, allocations go to Weisi Sub-district and then have to be requested
		Waiting room floor disintegrating '*because used river stones to mix the concrete'*	No action
B2a	School (MVP)	Solar panel for borehole stolen (2015)	No action
		Poly tank moved to serve the Principal 'for security'	No action
		No solar panel for the computers	Community asked to contribute GHS 10 for electrical connection but many unwilling so money raised returned
A3	School (MP)	Limited and broken furniture	Waiting on MP
		Poorly maintained teachers quarters	Waiting on MP
	CHPS (MP) 2015	Bed bolts missing so never properly fixed	No action
		Serious structural cracks in walls and ceilings, leaks	No action
		Battery for motorking (NGO donated) ambulance stolen	Managing by pushing to start






Many examples of poor workmanship and poor maintenance; broken school gate, broken school furniture, poorly stored school resources, leaking roof in project areas. Much of the equipment has the MVP inventory code on them.

Political change and development

Five of the six study villages voted in new Members of Parliament (MPs) in 2016 (the only one which did not was the 'remarkable comparison village' which reinstated their MP for a second term). All incumbent MPs are members of the National Democratic Congress (NDC). People shared that they change how they vote depending on the promises made and often '*get it wrong'* voting in MPs which are not part of the ruling party as is the case now with the New Patriotic Party in power and who therefore '*have little influence on what we can get.'* People are very much influenced by the pre-election development projects undertaken and promises made for local development during the campaign. Table 9 indicates the surge in activity in election years.

The significance of MPs to village development is huge and the following notes some of the development assistance provided in 2016 (election year).

Table 9: MP support

Village	MP's support in election year (2016)
B3 project	New surfacing of main roadwork slowed down after election but signs say it was always going to take three years (completion end 2018) *'but people don't know this and would not have voted if they thought it would take three years'*
	Support for extra classes at JHS
	Each student got five exercise books
	Former MP donated computers to JHS
B2b comparison	Former President visited and promised newly surfaced main road to Weisi- work commenced in a hurry, removing old surface- then stopped after elections (now worse than before)
	Materials (cement) for community built school building
A1 project	Former MP paid for two market sheds
	Subsidised tractor services (MP owns 300 acres nearby)
	Current MP offered to pay for all repairs to main road (rejected by District Assembly)
	Huge expectation for the future as MP's grandmother comes from this village
B1 project	KG construction at primary school (people also attributed the new classrooms but these were built with District Assembly funds)
	School store for feeding programme
B2a project	Renovations to health centre attributed to former MP (completed at peak of campaign)
	Promise to extend electricity to the school
A3 comparison	NHIS free for two years (but since expired)
	31 new culverts on the road into the village
	Four classroom primary school (work had stopped on this between 2013-16 because he was not elected)
	School uniforms and bags

Familial connections to particular villages are seen as key in getting special attention. For example, the most developed village B3 (project) the former MP was born there and many said they wanted to keep him especially as the new MP has never visited them '*we have only seen him on TV in Accra'* and

suggesting that he must have bought votes. But others said it is *'still too early to tell'* and some said '*we needed a change.'* As well as this link, the former District Chief Executive is also from this community.

People are optimistic that the new MP for A1 (project) will privilege them as '*his grandma lived in village so this place is close to his heart'* (said the former Assemblyman); some said '*this is our time now.'*[31]

Village A3 (comparison) has the same MP as A1 (project) but, despite attributing key developments to him (see Table 9), worry because '*his party is not in power and he might not be able to do much.'*

[31] Even though it was seven months since the 2016 election, exceptionally large numbers of people were still wearing election T-shirts and hats in this village.

4. Discussion

As this was the final year of the longitudinal RCA study, the whole RCA team undertook a longer and more detailed reflection and analysis process through a two-day sense-making workshop immediately following the field immersion. The team had never been made explicitly aware of our special interest in MVP as we wanted them to take a holistic stance on understanding change from people's perspectives. This also means that they have never been told which communities were project and which were comparisons. The analysis that they undertook therefore contains less evaluation bias and is based entirely on what people in villages shared and what we ourselves experienced and observed when living in the villages.

Poverty ranking of villages

As before the research team undertook a ranking of the villages based on indicators most often identified by people as linked to village development. These indicators included:

i. the state and accessibility of roads;
ii. provision of electricity (especially to households);
iii. accessibility and vibrancy of markets;
iv. access to all levels of basic education;
v. access to health services;
vi. agricultural production and profits;
vii. other livelihoods (diversity of opportunities and potential to earn);
viii. political connectedness.

Table 10: Researchers' poverty ranking of villages

	2013	2015	2017
Least poor	B3	B3	B3
	B2a	B2b	B2b
	A1	B1	
	B1	A1	A1 = B1
	B2b	B2a	B2a
Most poor	A3	A3	A3

The resultant ranking was similar to previous years, but what was interesting in the exercise was that the gap between the rankings had changed significantly (this is not adequately represented in the table). Project village B3 had always been much more developed and connected than the other villages from the outset but over the years little improvement in this position was seen. In fact, there are signs of problems emerging with **low community participation** (the schools cannot get PTAs to take action, **maintenance is left** to *'from up'* (i.e. reliance on Government) and people are **reluctant to provide local contributions**, and pervasive comments such as *'you have to pay for everything in this village, nobody moves for free'* suggests dependency and entitlement culture is developing). By contrast, comparison village B2b had developed remarkably and closed this gap between itself and B3 (project), especially in terms of the access to education (its own community initiated primary school which had been adopted by Ghana Education Services and the foundations of a new SHS) but most importantly the rehabilitation of the dam had increased agriculture profitability.

Project village B1 has improved in terms of agricultural profitability, especially with the cowpea boon, but people feel the lack of electricity acutely and this has prevented the school and health clinic from operating as well as in other villages.

Project village A1 has benefitted from electricity and a well-functioning CHPS but road accessibility has declined (due to poor maintenance) and there has been little in the way of other positive change.

Project village B2a has yet to open the renovated health centre. Like B1 (project) it also struggles with teacher absenteeism because of its proximity to town, has uneven access to electricity and none in the school or health centre and has an Assemblyman whom they never see.

Although comparison village A3 is still at the bottom of the rankings, it is here that some of the most dramatic positive changes have taken place in the four and a half years of the study. Previously this 'far' comparison was regarded as remote and cut-off. It had very poor school buildings, chronic teacher absenteeism and an abandoned, partially constructed health centre. It has since enjoyed considerable development of public facilities and an access road, has its own, albeit, small market and people say '*we feel connected.'* Agriculture (cowpeas) and domestic migration have increased and families have more disposable cash and accumulated assets from these livelihoods. With its new active MP it is poised to complete some of the other deficits such as electricity connection and has an apparent attraction for NGO programmes and private company led agricultural programmes, which are poised to support them in the future (presumably because it has hitherto been regarded as relatively deprived but also because it has untapped potential and is now more accessible).

Development programmes

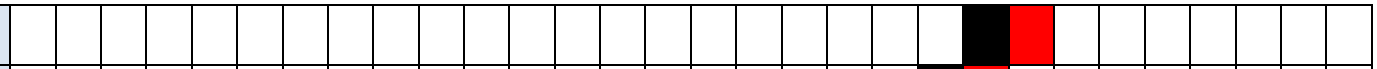
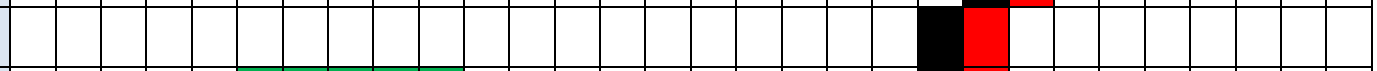
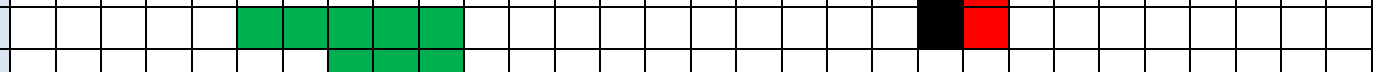
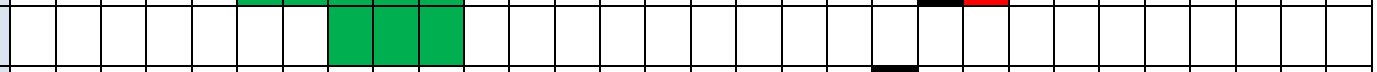
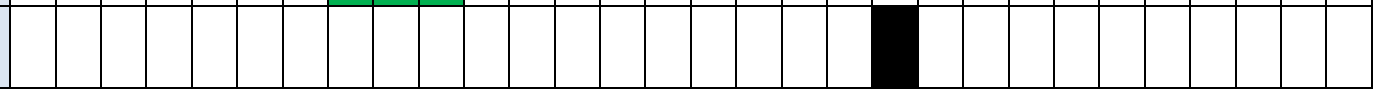
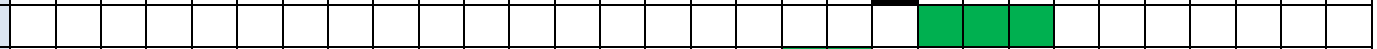
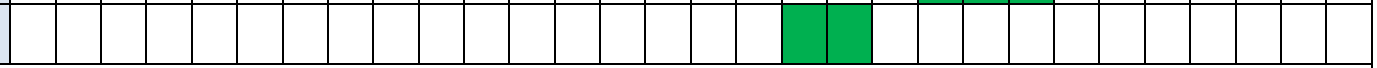
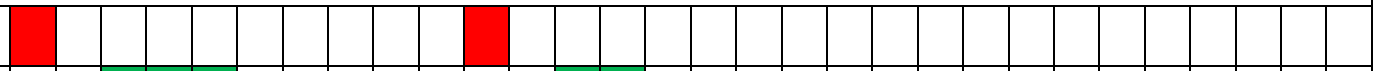
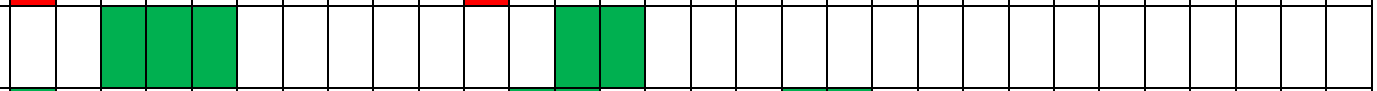
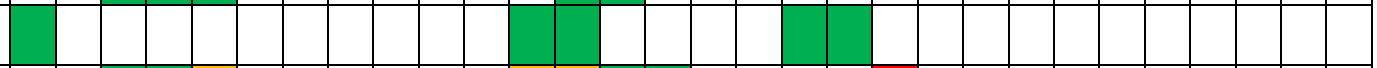
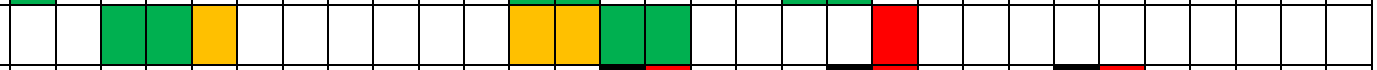
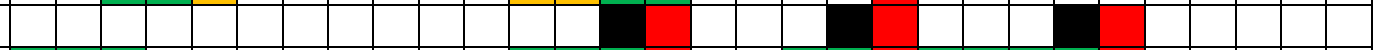
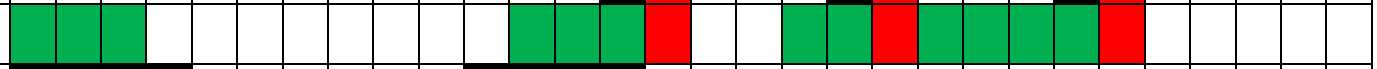
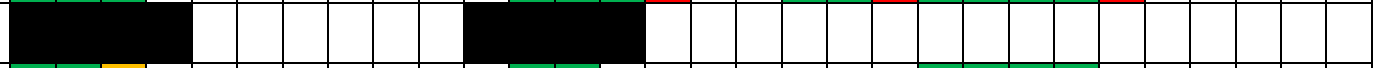
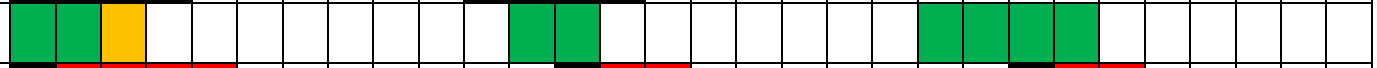
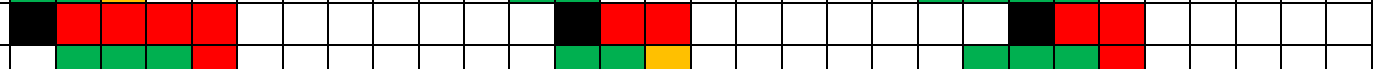
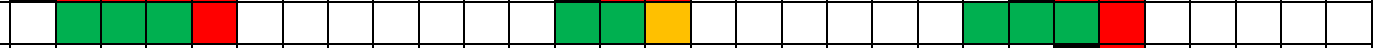
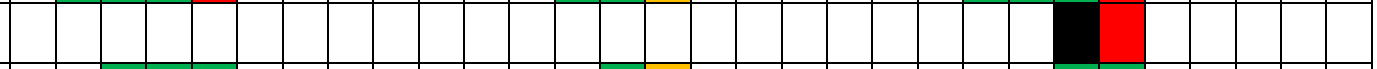
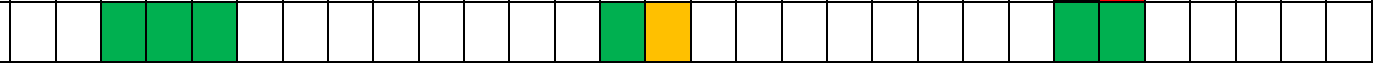
To complement this ranking of, primarily, public poverty (above) we also looked at the various development programmes that worked in the villages over the study period. Table 11 only includes programmes that people actually identified themselves as having ever operated in the village, so where there may be omissions is because people did not mention them (and, by implication, may suggest that they were not significant). We identified the intentions of these programmes and then **scored them based on how people viewed the achievements**. This analysis provided insights into the intensity of development activity in villages and the mix of development actors. For example, it is clear that comparison village A3's achievements are primarily due to the efforts of NGOs and the MP and comparison village B2b had few programmes and achieved much of its development through self-help initiatives (see case study).

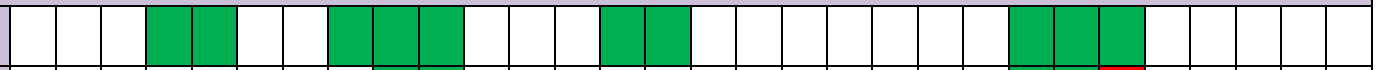
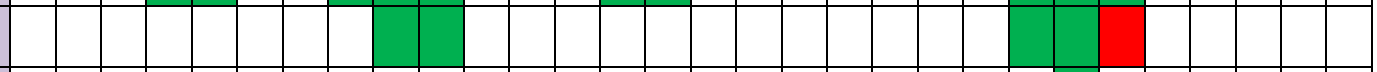
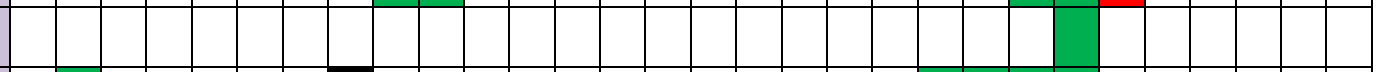
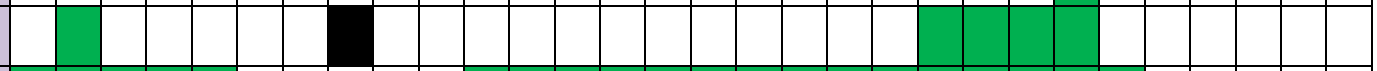
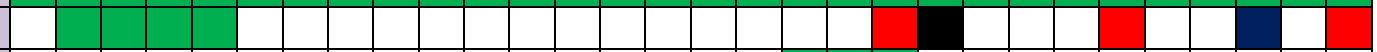
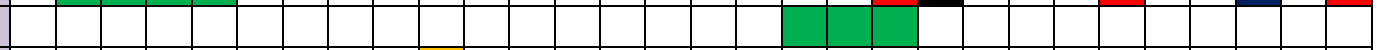
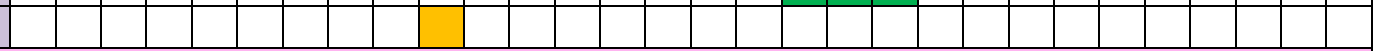
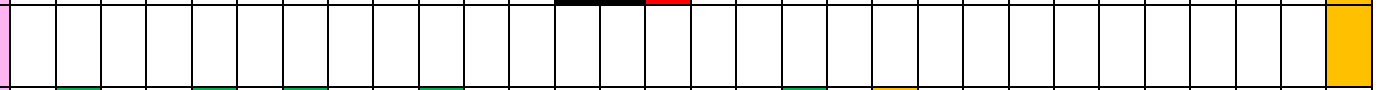
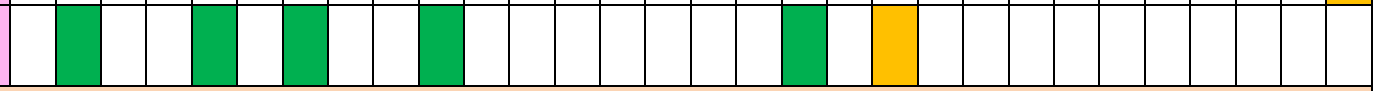
More success as seen by people themselves can be seen with very simple service delivery-type programmes such as provision of tractor services, electricity, NHIS, LEAP and gifts/donations than those programmes requiring behaviour change. The programmes requiring adoption of new agricultural technologies, market systems, toilet use, improved hygiene practice, looking after livestock or trees were less successful. Those programmes requiring establishment of systems for ongoing maintenance such as roads, boreholes and hospital transport were also less successful irrespective of the implementing agency.

Table 11: Development programmes and how people viewed their success

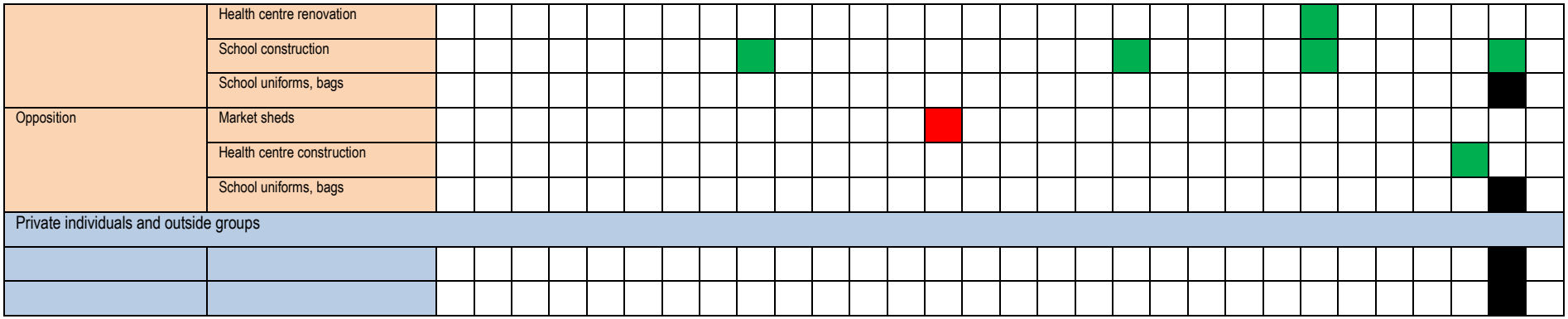
People view as success	People view as limited success	People view as failure	Implemented

Programme	Intention	B3 project					B2b comparison					A1 project					B1 project					B2a project					A3 comparison				
Donor funded programmes																															
USAID- Education	JHS construction																														
	Learning materials																														
Indoor Residual spraying – USAID support for Presidents Malaria Initiative	Malaria control																														
Saudi Arabia	Provision of drinking water (well)																														
UNICEF	Learning materials/school furniture																														
Sustainable Land and Water Management Project (World Bank)	Prevention of river erosion																														
Northern Rural Growth Project (IFAD and AfDB)	Number of initiatives (storage, market linkage) to increase economic gains from agriculture																														
Non-government																															
Plan Ghana	Strengthening Health Outcomes for Women and children (SHOW) project																														
	Resources for community health volunteers																														
TechnoServe	Demonstration plots for improved agricultural production																														
Catholic Relief services	Transport for patients (especially pregnant women)																														
	School toilets																														
	School feeding																														
World Vision	Drinking water provision																														
	Toilets/school toilets																														

Presbyterian Church of Ghana	Women's irrigation programme – income generation in dry season	
	Asset transfer – economic empowerment	
	Distribution of clothes (annual)	
CBM International	Maternal health and social accountability	
School for Life	Remedial mother tongue education for reintegration into mainstream school	
Jesus Mission	Distribution of groundnut seeds	
Yagba church	Distribution of clothes and food to needy	
MVP		
SADA – agricultural loans	Increase productivity making access to inputs easier	
SADA Community Health Centre	Construction & improvement to localise health care (including nurses quarters)	
SADA- school construction	More classrooms including KG and better facilities	
SADA- teachers quarters	Tackling absenteeism & attracting better teachers	
SADA- Household toilet	Reduce diarrhoea, improve hygiene	
SADA- additional teachers employed	Filling gaps in schools	
SADA- school uniforms	Ease economic burden and increase school going	
SADA Community health volunteers	Improved access to medicines and health information	
SADA – school toilets	Improved hygiene	
SADA- tractor services	Timely, affordable tractor services	
SADA- women's cooperative	Collective economic empowerment of women	
SADA- village savings and loans associations	Help savings habit for women	

SADA- tree plantation	Environment and income generation	
Government programmes		
Rural electrification	Household, social services and enterprise connection to electricity	
National Youth Employment programme	Provision of additional teachers	
Ghana Social Opportunities Project	Cash for work	
Global Education Partnership Grant (GPEG)	Improve school friendliness	
Ghana School Feeding programme (GSFP)	Sustain school attendance and improve nutrition[32]	
Livelihood Empowerment Against Poverty (LEAP)	Cash transfers for vulnerable households including the elderly and persons with disabilities	
National Health Insurance	Affordable health care	
Cocoa Board	Community lighting- security	
Roads	Feeder road to Fumbisi	
Planting for Food and Jobs	Agricultural productivity	
Private companies		
Integrated Water and Agricultural Development Ghana Ltd (IWAD)	Commercial rice cultivation/demo of intercropping practice	
Weinco Ghana Ltd	Masara N'arziki (Maize fpr Prosperity) improved maize production	
AGA Mal (private mining company but this initiative funded by Global Fund)	Indoor residual spray malaria control	
Political parties		
MPs	Computers/teaching resources for schools	

[32] Although people appreciate the programme and say it does encourage attendance, it does not, in their view, improve nutrition.


Health centre renovation
School construction
School uniforms, bags
Opposition
Market sheds
Health centre construction
School uniforms, bags
Private individuals and outside groups

Case study: 'Comparison village' moving forward by itself

We first noticed that this village was doing well in 2015. It rose from second to bottom in our poverty ranking in 2013 to second to top out of six villages in 2015. In 2017 it remained in this position and we wanted to know why. What we discovered is instructive for future programming and to understand why some of the MVP project interventions may have been less successful than they could have been.

The community, like some of the 'project' villages, is within walking distance from a thriving market and transport access to various small towns. Mostly Builsa people comprising traditionalists and some Christians (and a few Muslims) live here. In 2013 livelihoods were described as mostly subsistence farming with low livestock ownership. Despite proximity and long-term rights to farm at the nearby dam, we quoted a man who said that, '*Only those farming on a large scale make a profit these days.'* The road to this farmland had deteriorated since an International NGO (INGO) had withdrawn support and they faced competition from imports from Burkina Faso. Most were pessimistic about the future of farming especially in view of the unpredictable rains they were experiencing: *'Rains do not come the way they are supposed to. When I was young they came in late March now they come in May or June and stop by September'* and the drying up of the dam. They had access to a relatively good sub-district health centre (with 20 staff) but the facility was experiencing a severe shortage of medicines and water. There were electricity poles lying around in the village but people were sceptical about getting electricity feeling that this was an '*election ploy.'*

Most remarkable was that the community had started its own primary school in 2010, first '*under a tree'* with three volunteer teachers because the nearest alternative was '*too far for young children to walk'* (about 45 minutes). They subsequently built their own school with the support of the youth group when they failed to get Government support for the teachers. Researchers noted that parents in this community demonstrated strong motivation compared to other study villages to send their children to school as epitomised by the quote we used from a father in the 2013 RCA report: *'Even if I have to sell my last goods I will make sure my child goes to school';* we noted a very high level of school going. This was not only better than other villages but was achieved without a school feeding programme or distribution of free school uniforms. It was also clear that they had an active PTA, which among other things had taken the initiative to put in place speed bumps on the road to increase safety near the school. By 2015, the school had three classes (Kindergarten (KG), Primary classes 1 and 2) in a community built mud building with zinc roof with an enrolment of about 70 and three Government trained teachers. The MP had provided 100 bags of cement to support the further construction of the school. Researchers remarked at the time how different this school felt compared to others with children happily going off to school in the mornings, punctual starting (even though the teachers came in from outside the community each day) and a *'fun and interactive curriculum.'* They also noted that children they met outside school were '*keen to share what they did in school with us.'* The researchers said the children *'know songs, dance and make things at school*' (unlike our experience from the other schools). We heard that this community had offered 30 acres of land for the construction of an SHS when no other community nearby was prepared to do this.

Between 2013 and 2015 the dam underwent rehabilitation and further hardships were endured. People told us that they *'survived'* the dry season by moving to Accra for work or undertaking *kayaye* work in Kumasi. But the community had successfully lobbied for two new boreholes from a local NGO and a group from the USA, and further support for the primary school from the MP. Returning in 2017, the school has doubled its enrolment, provides classes up to Primary 3, has nine teachers (of whom four are Youth Employment Programme teachers from the community) and is fully using the three classroom block that the community has built despite it still having an unmade floor. All the labour for this construction was provided by the community in 2016. The MP has provided further cement '*enough to complete the floors'* and the teachers told us they would get this done even if they themselves paid for the labour. The dam rehabilitation is complete and people told us they could grow vegetables in the winter so nobody migrated for work last year. They also shared that if they themselves don't cultivate at the dam there is plenty of waged work available (especially on rice fields) and young people have been attracted back from the 'south' to work. Although there are no tractors to hire, farmers either have their

own bullock ploughs, borrow from neighbours or arrange for youth in the community to plough for them with a small payment or with food and alcohol only. We overheard conversations among neighbours during this ploughing time such as, *'when you have finished please help the man who does not have bullocks'* (where nothing more than a tot or two of local gin was expected as payment). Buyers come to the dam to purchase produce or farmers arrange *motorkings* to take to market. There has been a good system of communication of market prices among the community using mobile phones since we first stayed in the community, which is attributed to Weinco. Other than this there has been no active agricultural project in the area since the INGO left in 2012. Increased productivity has been the result of farmers' own networks, cooperation and trust. People shared that they have been able to buy motorbikes and mini-power tillers with the profits from farming accrued over the last two years. There is also quite a bit of optimism since electricity has been installed in much of the village and the proximity to the town makes access to markets and health services using *motorkings* relatively easy. When the borehole broke down in 2016 the community contributed money and got someone to fix it.

We heard a number of comments from people outside the community which also suggest that this community is different. The NHIS outreach worker indicated that it is '*easy to mobilise people here… just inform the sub-chief and there is always a good turnout.'* The health workers at the sub-district health centre noted the community is '*always accommodating when we need to give out health information.'* People in the village said that ANC sessions held at the school were always well attended. Two of our researchers have been part of Electoral Commission teams registering voters, one in 2012 and another in 2015. The former noted, '*we had to stay here ten days and every day women were organised to cook for us… we did not get this in any other community we stayed in.'* The one who was an officer in 2015 shared that, *'we could not believe this community had built their own school. They were so hospitable when we came there.'*

The political economy is worth noting. The two researchers who worked for the Electoral Commission both noted that many people shared the same last name. Although the long serving Assemblyman did not live in the community she was from the same 'house' her brother lived in in the community and she was active in serving the community such as collecting LEAP payments for people who could not do this themselves. The sub-chief is described as '*young, friendly and serious,'* is a farmer in the village, is said to settle disputes (even domestic ones) with fairness and was '*courteous and welcoming to us* (research team). The new Assemblyman elected in 2015 told us, '*this is a close knit community who do things for themselves.'* The clan chief is based in Kumasi and is said to have *'lots of influence in the animal trade.'* He and elders provide ongoing advice to the community and mobilise support among the clan. For example, there is an annual 'homecoming programme' which raises funds and support. The MP for the area has been elected three terms in a row.

Thinking about the remarkable differences between this proactive and cooperative community and the other five communities the RCA team stayed in, we came up with the following insights:

- While the community is now seeing agricultural opportunities (with the rehabilitation of the dam) and are optimistic about their future livelihoods, this has not always been the case and the years between 2012 and 2015 were extremely difficult. Nevertheless, community initiative and independence was in evidence;

- When faced with needs, this community does not wait for outside help (it started its own school '*because the KG was too far away,'* organised installation and repair of the boreholes, developed its own system of sharing ploughing);

- When the community mobilises around its own initiatives this generates pride and use. They are willing to improvise, make do until they can afford time and resources to complete premises (the school started under a tree, currently the Primary class 4 operates in a makeshift classroom and the school floors are still un-made). They undertake this at their own pace (not pushed by outside agendas) but take a future-oriented view of development;

- Organisation is entirely local and clan-based (rather than forced from outside). The Chief, elders and sub-chief advise and facilitate based on community priorities and organise community self-action. There is a palpable

sense of '*we did it ourselves'* and a healthy rivalry with neighbouring communities. There is very high trust in the community;

- The proactivity of the community has elicited helpful and appropriate responses which do not undermine their spirit of doing things themselves, e.g. donations of cement by the MP, official recognition of the donation of land for the future senior high school and local construction efforts at the primary school and the senior school site. It would be easy to offer to complete these works but letting the community complete for themselves ensures the sense of ownership, which, in turn, fosters good care, maintenance and non-dependency.

Behaviour change

We also wanted to look at certain key aspects of behaviour change and the drivers of those changes as perceived by people themselves. The scores are based on emic (insider) perspectives. Table 12 is a summary of this. Caution needs to be exercised in interpretation of the table as an upward pointing arrow does not necessarily imply much positive change.

Table 12: People's perspectives of behaviour change

Location	Using/ needing cash	Going to primary school	Getting medicines	Using fertiliser for maize	Using mosquito nets	Not defecating outside	Better baby hygiene	Using family planning
B3 project	↑	↑	↑	↑	↑	→	↑	→
B2b comparison	↑	↑	↑	↑	↑	→	→	↑
A1 project	↑	↑	↑	↑	↑	→	→	→
B1 project	↑	→	↑	→	↑	→	→	↑
B2a project	↑	↑	↑	→	↑	→	→	→
A3 comparison	↑	→	↑	→	→	→	→	↑

↑ Increased over the period 2013–17, → no change

The reasons given (or drivers) for the changes as expressed by people themselves are captured below.

Using/needing cash has increased in all the villages because:

- Health costs including NHIS (B2a, A1, A3 (comparison), B3);
- Utilities costs (electricity, airtime) (B2a, A1, B2b (comparison), B3);
- Farm inputs, especially tractors and agro-chemicals (A1, B2b (comparison), B1, A3 (comparison), B3;
- Renovation and construction of houses, especially zinc roofs (B2a, B1, B3);
- Social and religious commitments (B2b (comparison), B2a, A3 (comparison));
- Developed taste for snacks, clothes, batteries, toiletries- increasing consumerism (A1, B1, A3 (comparison);
- Food and drinks for labourers (B2a);
- Transport of goods (B2b comparison).

Going to primary school has increased in all the areas except B1 (project) and A3 (comparison) because:

- Increased motivation and aspiration of parents (B3, B2b (comparison), A1, B2a);
- Feeding programme (B3, B2a);

- Play equipment (B3, B2a);
- Increasing numbers of role models (teachers, nurses) in the village, aspirations of children (B2b (comparison), A1);
- Teachers in every class (A1);
- Proximity of JHS (B2b (comparison);
- School easily accessed (B2b comparison).

The reasons primary school going is staying the same or declining in B1 (project) is a combination of lucrative alternatives to education (cowpea cultivation) and the lack of successful role models who got better jobs as a result of education. In the comparison village A3, teachers are too few and often absent so people see little point and there is a preference to seek cash incomes '*down south.*'

Getting medicines has increased in all the villages because:

- Increased number of sources: CHPS, medicine shops and sellers in markets (A1, B2a, B2b (comparison), A3 (comparison), B3);
- Less costly because of NHIS (B2b (comparison), B2a, B1, B3);
- More experience of/trust in orthodox medicine (A1, B1, A3 (comparison));
- Radio and TV adverts (B2a, B3);
- CHV provide free (A1, B2a);
- Improved road to Fumbisi (B1, A3 (comparison));
- Better supplies in CHPS (B1, B3);
- Recommendations from relatives and friends (B2b (comparison)).

Using fertiliser for maize has increased in B3, A1 and B2b(comparison) because:

- Cost reduced/government subsidy (A1, B2b (comparison), B3);
- Experienced better yields (A1, B2b (comparison), B3);
- Better road to market/better availability (A1, B2b (comparison));
- Worthwhile to use on rehabilitated dam land (B2b (comparison));
- More commercial approach to farming (B3).

But has not increased in A3 (comparison), B1 or B2a because:

- Cannot afford (A3 (comparison), B2a);
- Grow only for own consumption (B1, B2a);
- Difficult to access (A3 (comparison));
- Limited knowledge about use (A3 (comparison));
- Land considered fertile enough (B1);

- Practice crop rotation (B1);
- Waiting for free distribution (B2a);
- Use manure which is plentiful here (B2a).

Use of bednets increased in all locations except A3 (comparison) because:

- We stayed at the season for mosquitoes (B3, A1, B1, B2a, B2b (comparison));
- Enough bednets (B3, A1, B1, B2a, B2b (comparison));
- Knowledge of link to malaria (A1, B1, B2b (comparison));
- Advice of relatives especially those who have migrated (B3, B2a);
- Active CHW (B3, B1);
- Imitating neighbours (B2a).

In A3 (comparison), the IRS had been effective, there had been little rainfall and because it was not as hot, we slept in bedrooms rather than outside so bednets were regarded as unnecessary.

Defecating outside had not reduced in any of the study villages because:

- Considered normal and preferred practice (B2b (comparison), A3 (comparison), B2a, B1, A1, B3);
- Rocky or grassy, tree protected private places available (B2b (comparison), B1, B3);
- Poorly constructed latrines are hot, uncomfortable and unsafe (B2a, B1, B3);
- Told to build latrines but don't see the need (B2a, A1, B3);
- Worried about smelly/filled latrines (A3 (comparison), A1);
- Plenty of space (B2b (comparison), B1).

It is noted that behaviour change is at the heart of community-led total sanitation (CLTS), which SADA claimed to follow. The Government of Ghana Ministry of Local Government and Rural Development formalised its commitment to CLTS in 2010 and launched a guideline for all organisations involved in sanitation to follow. It has issued notes on several occasions warning, for example, that, *'taking short cuts in implementation is not the way to go as this will not lead to sustainable behaviour change outcomes*' (Chief Director, 24 August 2015). Under no circumstances should CLTS be construed as construction of toilets and be led by this. There was no evidence from the RCA that CLTS was implemented in any way like the Government guidelines require.

Baby hygiene practices have improved only in B3 (project), because:

- Active outreach by CHWs and nurses **in the past** (mostly pre MVP);
- Radio and TV adverts;
- Imitates neighbours;
- ANC and PNC sessions **in the past** (mostly pre MVP).

There has been no improvement in the other villages because:

- Mothers have many children and little time as busy farming/chores (A1, B1, B2a, B2b (comparison);

- Believe God protects (A1, B1, B2a, B2b (comparison));
- Don't think baby faeces contain harmful things (B1, A3 (comparison));
- Baby poo is food for animals (B1, B2b (comparison)).

Using family planning has improved in B2b (comparison), A3 (comparison), B1 and to a small extent in A1 because:

- Cannot take care of many children, want to take better care (B2b (comparison), A3 (comparison), B1, A1);
- Better access to family planning (B2b (comparison), B1, A1);
- Talks in the community by nurses and CHVs (B2b (comparison), B1);
- Desire to space children and ensure mother is strong (A3 (comparison), B1);
- Better knowledge of family planning (A3 (comparison), A1);
- Can go to health centres secretly (A1);
- Have time to work for cash (A3 (comparison));
- Adverts on radio and TV (B2b (comparison).

But has not improved in B2a or B3 because:

- Lack of husband's support (B2a, B3);
- Fear of complications from using family planning (B2a, B3);
- Children are considered gifts from God (B2a, B3);
- Distance to clinic- no local health centre (B2a);
- Prestige from having many children (B3).

Individuals that make a difference

Our analysis of the villages during the sense making suggests that the key to community development is the prevailing **political environment** and people are well attuned to this. Their flip-flop voting patterns from election to election demonstrate their efforts to secure support for their own direct development rather than wider political aspirations. The project village B3 which has always topped the list in terms of development rankings among the study villages enjoyed political patronage from the start with a very supportive MP who had been born and raised in the village, links to the District Chief Executive and an '*always available'* Assemblyman. The MP is a 'social worker' and is credited with having lobbied for a number of projects for the village, has helped youth get employment through the Youth Employment Programme, often visits the village, will take phone calls from villagers and makes his own regular donations, for example, to the schools. Although the Chief lives in Tamale and makes few visits, people feel he is influential and has undertaken initiatives such as tree planting on the roadside and youth education.

Comparing this to the two least developed villages is informative; project village B2a has an Assemblyman who runs his own medicine business in town and rarely visits, in fact from 2013 people told us that they did not know who he was and people felt their current MP had done nothing for them until the 2016 elections (when he promised to open the rehabilitated health centre) and had met him just once a year in an annual *'durbar'* (village celebration). In comparison A3, people complained in 2013 that they did not trust the Assemblyman and he was not from their community so rarely visited. Only since they have elected a new Assemblyman from the community

(the former Community Education Volunteer) and elected the new MP who was responsible for much of the construction development work in the village, do they think they are now in a position to develop.

The second most developed village is the comparison village B2b, which has a strong tradition of self-help. What is particularly noticeable here is that the political patronage it enjoys recognises and endorses the self-help initiatives by providing resources for this (funds, cement, etc.) rather than taking over the projects for them. The brother of the former Assemblywoman (replaced only in 2016) always assumed the link role between the community and his hardworking sister based in Sandema. The brother was renowned for '*going the extra mile'* by helping people with tractor services, collecting their LEAP payments on their behalf and working as a youth leader. The Sub-Chief is young and well respected.

We feel project village A1 has been held back by its leadership. The elderly Chief is now ineffective but his family dominates everything in the village through their connections. Benefits have without doubt been captured by his relatives, one of whom was the former Assemblyman, and they are positioning themselves to take advantage of all future development, especially as they have very strong family links to the new MP. This village is an example of political connectedness that serves only the elite. The effectiveness of MVP interventions here were much dampened by this elite capture.

Another factor that emerged strongly from our analysis of drivers of development and hints at positive behaviour change that was sometimes apparent in some communities was the presence of what we dub **'heroes.'** These are individuals who have worked beyond the minimum with passion for change and development. Tellingly, comparison village A3 does not have any such heroes (although the former Community Education Worker who is now Assemblyman may become one in the future) but the most successful village B3 (project) has many. In addition to its political connections, B3 had a former midwife who was remarkable for her energy and outreach programmes. The hygiene and nutrition practices, which were much better than all the other villages, and former adoption of family planning (since reversed) were largely attributed to her. She was supported by another 'hero,' an elderly CHV who has been doing this voluntary work since 1992. He is passionate about his work, helps in the ANC and PNC sessions and makes regular home visits and people regard him with affection but also listen to his persistent advice. Another nurse is also currently active in making home visits and promoting exclusive breastfeeding and this community is ahead of others in adopting this practice. Village B3 also has a 'hero' in their JHS principal. He makes home visits, organises free extra tuition, has a strong vision for the school and gave up his housing to accommodate outside teachers.

Not only does the comparison village B2b have strong leadership in the Assemblyman and Sub-Chief, the primary school head is another 'hero' who works hard for the school, uses his own money for repairs and renovation and looks after the school's assets.

Project village B1 has a *'drunkard Assemblyman who doesn't visit the village, never thanked us for voting for him and doesn't care about us'* but does now have a new chief whom they trust and regard as excellent in dispute resolution. They also have a very energetic nurse in charge of the CHPS whom villagers constantly refer to in conversation as someone who is friendly and makes home visits; they particularly like the fact that he lives in the village. Another 'hero' is the head of the Fulani's, the only Haji in the community, who is regarded as a unifier.

While project village B2a does not enjoy political patronage it does have some 'heroes.' One of the CHVs was consistently singled out for her special attention to people, her home visits and willingness to arrange ambulances in emergencies. She has continued after MVP has stopped paying allowances. The head of the primary school is also exemplary in his punctuality, reviving the PTA and his home visits.

Another factor that emerges strongly especially from the two most developed villages is the **continuing connection with past and influential residents**. In B3 (project) the community has good connections with a number of people who live outside the community who donate from time to time. For example, they are currently using these networks to secure a solar panel for the teachers' quarters and successfully received a donation of

textbooks recently from a private donor. Comparison village B2b maintains good connections with families with origins in the village through its annual homecoming events and has new boreholes donated by non-profit groups and Church groups overseas. A former resident is also a bank manager now and uses his position to lobby for donations.

RCA team recommendations for better programmes

Based purely on their experience without knowledge of which communities were project and which were comparisons, the team (only two of whom are development professionals) was asked to share their learning about what works/does not work for community development. The following are their main ideas:

- Better understanding of the real needs of the community so that programmes can be more responsive (e.g. *'do an RCA first'*);
- Understand the context better, especially the political context of each village;
- Take longer, go at the community's pace;
- Use the community's indicators for success (not external indicators);
- Ensure better supervision of programmes;
- Involve people more in all stages of the implementation of the programmes;
- When doing behaviour change programmes, educate first (generate a need) then introduce the goods and services;
- Use local facilitators to lead change processes so people can relate to them ('*people like me').*

Annex 1: Team Members

Mampruli team
Sule Ahmed – Researcher
Millicent Ayale – Researcher
Dee Jupp
Beatrice Sarpong
Nimatu Yahaya – Translator
Shefawu Yahaya – Translator

Builsa team
Patience Abukuri
Ewald Adumpo
Abdulai Alhassan – Translator
Zeno Akaatali
Benjamin Paul Anyeembey
Augustine Atimbey
Justice Azaayam
Tony Dogbe

Annex 2: List of people met during the study

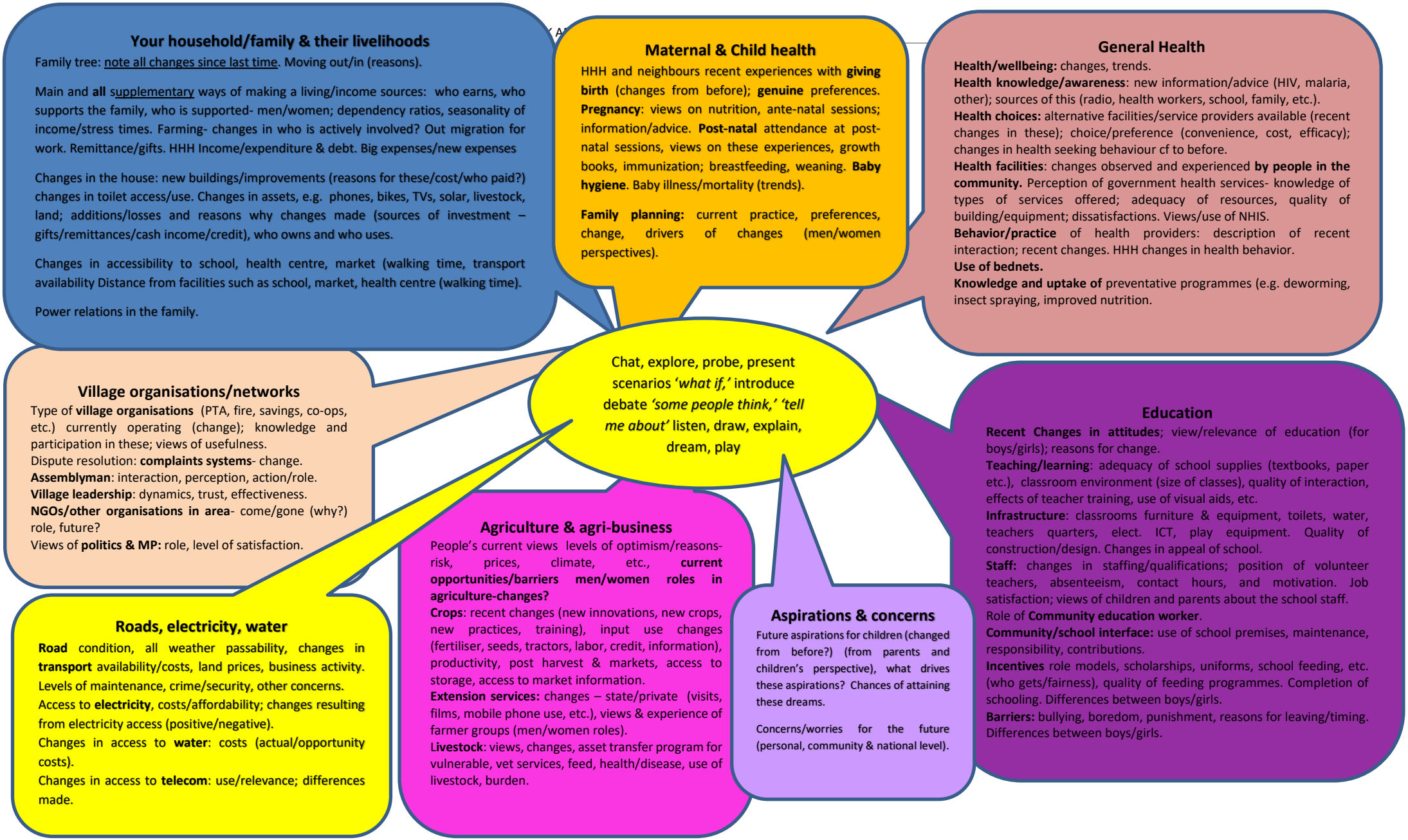
All locations				
	Men	Women	Boys	Girls
Host Household	37	37	15	17
Neighbours	53	62	8	12
Other community	88	96	8	3
Teachers	19	7		
Nurses	9	5		
CHV	5			
Tractor driver	4			
Agric suppliers	3			
Medicine shop/seller	3			
Mosque/church leader	5			
Cook in school		4		
Cleaner in CHPS		1		
Market traders		12		
Chief/Elders	5			
Provision shops	2	5		
Zoomlion cleaners	2			
Mill owner	1			
Transport providers	5			
Students			36	45
Non-school going			18	13
TBA	2	1		
Para-vet	1			
Total	**244**	**230**	**85**	**90**

Annex 3: Family changes

Changes in the families we stayed with over time

No. of generations	Female headed	No. in household			Dependency ratio			
B3		'13	'15	'17	'13	'15	'17	
3	✓	5	7	7				Widow, children & grandchildren
3	✓	6	3	Widow died			-	Widow, children & grandchildren
3	✓	9	10	10				Widow, son and daughter and their family
A1								
2		7	6	8				Father, two wives & children
3		12	13	15				Father, father's sisters, mother children, nephew & family, grandchildren
3		12	8	13				Father, mother, children and grandchildren
2		3	3	5				Father, mother and son, in '17 grandchild
A3								
3		11	9	9				Father, two wives children & grandchildren
3		8	8	11				Father, mother, children & grandchildren
3	✓	4	5	3				Widow, children and grandchildren
B2a								
2		4	3	2	3	2	1	Elderly couple & grandchildren
2		2	2	2	1	1	1	Old man and son
1		1	2	2				Widow on her own, then with granddaughter. Widows died and son and daughter live there
B2b								
1		2	2	2	1	1	1	Elderly couple
1	✓	1	1	4				Widow in '13 and '15. She dies and neighbour relatives take over house.
B1								
3		6	6	6				Father, mother, children and grandchild
3								Fulani family, very difficult to work out makeup of household

1 missing from B1 and B2b.


Your household/family & their livelihoods
Family tree: note all changes since last time. Moving out/in (reasons).
Main and all supplementary ways of making a living/income sources: who earns, who supports the family, who is supported- men/women; dependency ratios, seasonality of income/stress times. Farming- changes in who is actively involved? Out migration for work. Remittance/gifts. HHH Income/expenditure & debt. Big expenses/new expenses
Changes in the house: new buildings/improvements (reasons for these/cost/who paid?) changes in toilet access/use. Changes in assets, e.g. phones, bikes, TVs, solar, livestock, land; additions/losses and reasons why changes made (sources of investment – gifts/remittances/cash income/credit), who owns and who uses.
Changes in accessibility to school, health centre, market (walking time, transport availability Distance from facilities such as school, market, health centre (walking time).
Power relations in the family.
Maternal & Child health
HHH and neighbours recent experiences with giving birth (changes from before); genuine preferences. Pregnancy: views on nutrition, ante-natal sessions; information/advice. Post-natal attendance at post-natal sessions, views on these experiences, growth books, immunization; breastfeeding, weaning. Baby hygiene. Baby illness/mortality (trends).
Family planning: current practice, preferences, change, drivers of changes (men/women perspectives).
General Health
Health/wellbeing: changes, trends.
Health knowledge/awareness: new information/advice (HIV, malaria, other); sources of this (radio, health workers, school, family, etc.).
Health choices: alternative facilities/service providers available (recent changes in these); choice/preference (convenience, cost, efficacy); changes in health seeking behaviour cf to before.
Health facilities: changes observed and experienced by people in the community. Perception of government health services- knowledge of types of services offered; adequacy of resources, quality of building/equipment; dissatisfactions. Views/use of NHIS.
Behavior/practice of health providers: description of recent interaction; recent changes. HHH changes in health behavior.
Use of bednets.
Knowledge and uptake of preventative programmes (e.g. deworming, insect spraying, improved nutrition.
Village organisations/networks
Type of village organisations (PTA, fire, savings, co-ops, etc.) currently operating (change); knowledge and participation in these; views of usefulness.
Dispute resolution: complaints systems- change.
Assemblyman: interaction, perception, action/role.
Village leadership: dynamics, trust, effectiveness.
NGOs/other organisations in area- come/gone (why?) role, future?
Views of politics & MP: role, level of satisfaction.
Chat, explore, probe, present scenarios 'what if,' introduce debate 'some people think,' 'tell me about' listen, draw, explain, dream, play
Education
Recent Changes in attitudes; view/relevance of education (for boys/girls); reasons for change.
Teaching/learning: adequacy of school supplies (textbooks, paper etc.), classroom environment (size of classes), quality of interaction, effects of teacher training, use of visual aids, etc.
Infrastructure: classrooms furniture & equipment, toilets, water, teachers quarters, elect. ICT, play equipment. Quality of construction/design. Changes in appeal of school.
Staff: changes in staffing/qualifications; position of volunteer teachers, absenteeism, contact hours, and motivation. Job satisfaction; views of children and parents about the school staff.
Role of Community education worker.
Community/school interface: use of school premises, maintenance, responsibility, contributions.
Incentives role models, scholarships, uniforms, school feeding, etc. (who gets/fairness), quality of feeding programmes. Completion of schooling. Differences between boys/girls.
Barriers: bullying, boredom, punishment, reasons for leaving/timing. Differences between boys/girls.
Roads, electricity, water
Road condition, all weather passability, changes in transport availability/costs, land prices, business activity. Levels of maintenance, crime/security, other concerns.
Access to electricity, costs/affordability; changes resulting from electricity access (positive/negative).
Changes in access to water: costs (actual/opportunity costs).
Changes in access to telecom: use/relevance; differences made.
Agriculture & agri-business
People's current views levels of optimism/reasons- risk, prices, climate, etc., current opportunities/barriers men/women roles in agriculture-changes?
Crops: recent changes (new innovations, new crops, new practices, training), input use changes (fertiliser, seeds, tractors, labor, credit, information), productivity, post harvest & markets, access to storage, access to market information.
Extension services: changes – state/private (visits, films, mobile phone use, etc.), views & experience of farmer groups (men/women roles).
Livestock: views, changes, asset transfer program for vulnerable, vet services, feed, health/disease, use of livestock, burden.
Aspirations & concerns
Future aspirations for children (changed from before?) (from parents and children's perspective), what drives these aspirations? Chances of attaining these dreams.
Concerns/worries for the future (personal, community & national level).