



UK Department for International Development

THE IMPACT EVALUATION OF THE MILLENNIUM VILLAGES PROJECT:

ANNEX B: PARTICIPATORY RURAL APPRAISAL

Authors: David Korboe, with edits by Chris Barnett

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Results in development



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Acronyms

ACDEP	Association of Church Development Programmes
ADVANCE	Agricultural Development and Value Chain Enhancement
AEA	Agricultural Extension Agent
AGAMal	AngloGold Ashanti Malaria Control Limited
BECE	Basic Education Certificate Examination
Camfed	Campaign for Female Education
CEW	Community Education Worker
CF	Control Faraway [village]
CHPS	Community-Based Health Planning and Service
CHW	Community Health Worker
CLW	Community Livestock Worker
CN	Control Near [village]
CV	Control Village
GES	Ghana Education Service
GHS	Ghana Cedi
G-PASS	Girls' Participatory Approaches to Student Success
ICT	Information and Communication Technology
IMF	International Monetary Fund
JHS	Junior High School
LEAP	Livelihood Empowerment Against Poverty
MiDA	Millennium Development Authority
MoFA	Ministry of Food and Agriculture
MV	Millennium Village
MVP	Millennium Village Project
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Scheme
NDC	National Democratic Congress
PAS	Presbyterian Agricultural Station
PHC	Primary Health Care
PRA	Participatory Rural Appraisal
PTA	Parent-Teacher Association
PTTR	Pupil/Trained Teacher Ratio
SADA	Savannah Accelerated Development Authority
TBA	Traditional Birth Attendant
TLMs	Teaching and Learning Materials
TZ	Tuo Zaafi (staple meal of cooked dough)
UNICEF	United Nations Children's Fund
VSLA	Village Savings and Loans Association
YEA	Youth Employment Agency

Executive summary

- E1. The Ghana Savannah Accelerated Development Authority (SADA) Millennium Villages Project (MVP) formally closed at the end of December 2016. However, a three-month no-cost extension enabled a core team of project staff to be maintained to work on completing the process of handing over to the Government of Ghana. SADA subsequently took up the financing of a further nine months of the core team's work to enable them to tease out relevant lessons and to facilitate the mainstreaming of lessons by local authorities.
- E2. This participatory rural appraisal (PRA) provides a qualitative assessment of the MVP from the perspective of people living in villages in the area – both in the project's Millennium Villages (MV) and control village (CV) sites. The report draws primarily on focus groups with different socio-economic strata in each of the villages selected, and brings together their perspectives of change (their lived reality). This study complements the findings of the statistical assessment of impact.

Methodology

- E3. The categorisation of the focus groups was informed by a prior well-being ranking exercise conducted at the baseline in which community representatives compiled locally relevant descriptors of well-being for their community and matched those descriptors with well-being strata. In addition to the four recurring categories of rich, moderately rich, poor, and very poor households, a small minority of communities also identified either a "super rich" or "destitute" stratum. To enhance the tracking of qualitative changes and promote local learning from the evaluation process, the composition of the focus groups interviewed at the baseline was maintained throughout the evaluation. The interviews comprised:
- Focus group discussions with the different well-being categories, using the following PRA tools:
 - Well-being ranking to identify which households had moved up or down or kept their rankings over the evaluation period;
 - Scoring (and occasionally ranking) to assess changes in consumption and income;
 - "Ten-stone" method to elicit changes in proportions of boys and girls attending school;
 - Institutional mapping to assess changes in how the priorities and knowledge of the poor and vulnerable have been incorporated in the programmes, plans and budgets of external agents such as MVP and the district assembly;
 - Matrix scoring with well-being categories to assess changes in the provision of health services in the community;
 - Timelines and matrix scoring to assess changes in access to agricultural services, inputs and financial services and the impact of infrastructure on well-being.
 - Focus group discussions on similar issues with the following stakeholders: community leaders, children from households representing the different well-being categories, parents, Parent-Teacher Associations (PTAs), district education officials, teachers. Some children from Primary 6 were also selected randomly to test their reading of the Primary 6 reader.
 - Key informant interviews with some individuals who had fallen into or exited poverty, teachers who have been in the community the longest, traditional leaders, PTA members, community health nurses and volunteers, traditional birth attendants (TBAs), bone-setters, drug store keepers, agricultural extension workers and prominent farmers.

Key findings

- E4. Findings on well-being.** In all seven MVs sampled, participants perceived well-being to have improved overall, with a discernible shortening in the length of the hungry season. In general, households whose well-being declined had not actively participated in the project. Among the MVP's varied interventions, it was perhaps the improved know-how on planting in rows and correct spacing of plants that impacted well-being the most in poor households. Farmers in the MVs also generally perceive the partnership with the MVP to have improved their access to fertiliser, credit capital, tractor services and quality seed. Visits by MoFA's agricultural extension agents (AEAs) also became more regular in several MVs (e.g. MV6, MV7). Mainly through peer-to-peer learning, farmers in some riverine communities – MVs as well as CVs – acquired treasured knowledge on how to intensify the use of their lands through double-cycle cropping, leading to some significant improvements at CF1, CN2, MV3 and MV6. Farm sizes too have increased in both MVs and CVs (but less markedly in the latter) – for men as well as for women, and even among some poor households. Plus, the introduction of maize has been a singularly significant factor in addressing food security challenges in MV households. Across both MVs and CVs, the appetite for mechanised ploughing services has increased in response to a diverse range of actors, including MVP, Presbyterian Agricultural Station (PAS), Technoserve, Ministry of Food and Agriculture (MoFA), Millennium Development Authority (MiDA), Association of Church Development Programmes (ACDEP) and Agricultural Development and Value Chain Enhancement (ADVANCE).
- E5.** The Village Savings and Loans Associations (VSLAs) promoted by the project have been instrumental in mobilising women's savings and raising their confidence to engage and negotiate in the marketplace. Outside the MVs too, VSLA is gaining in popularity, though it tends to be implemented less rigorously and effectively. In some communities, women have diversified the crops they cultivate; with new crops including maize, cowpea and, to a lesser extent, soybean (in MVs). The increasing availability of tractor services in the MVs is enabling wealthier women to farm larger areas.
- E6.** Furthermore, the improvements in road infrastructure (typically the installation of culverts) were reported to be having a positive effect on enterprise development and, even more so, on the vibrancy of produce markets, ultimately impacting on livelihoods and well-being. Across the area, several markets which were previously either small or periodic have now become larger and are operating daily. At MV1, which has benefited from a road widening and culverting intervention, the research team found evidence of its impact on trading activity. At the baseline, the community had no identifiable marketplace; by the mid-term visit, a weekly market was running; and at the endline, the team found an active daily market which peaks every sixth day. Participants also cited several other services (e.g. transport, and some of the larger and better equipped health facilities) that have become relatively easier to access.
- E7.** There are, however, continued threats to any gains in well-being. In particular, people cite the variable weather patterns, cultural practices around funerals, the rise in livestock mortality rates, the out-migration of youth, and the negative effects of coping strategies (e.g. reliance on expensive money lending services, over-exploitation of the fragile forests for trees to produce charcoal). Repeatedly, people told us that the rains have become increasingly unpredictable. Despite investments in training and equipping community livestock workers (CLWs), people continue to complain about their cattle dying mysteriously.
- E8. Findings on child poverty.** In all MVs and in many CVs as well, net well-being was perceived to have improved for children. They are also eating more meals overall, especially in the MVs, and

their diets too are somewhat richer in protein (typically from legumes). Children in several MVs are gradually spending more time in school. As formal healthcare services have become more accessible (in MVs as well as CVs), so too have households begun to prioritise these options when their children are ill.

- E9.** Overall, the disparities between children from rich and poor households are perceived to have narrowed in the MVs since the baseline. The presence of a functional Community-Based Health Planning and Service (CHPS) compound, with resident nurses, is seen as a major contributor to the improvement in child wellbeing.
- E10. Changes in schooling.** Parents in MVs are sending their children off to school earlier (both in terms of age and time of day) than at the baseline, encouraged by the improvement in teacher presence. A combination of factors – especially the augmentation of the teacher stock with locally resident community education workers (CEWs) and the construction of teacher housing – have contributed to improvements in teacher-pupil contact time. However, the superior number of teaching staff in MV schools has come at a cost to CV schools (as the education authorities tended to give preferential treatment to MVs when allocating teachers). The quality of teaching has correspondingly improved in some MVs where observations were conducted, with teachers reporting that their work has become easier following the improved resourcing of their classrooms. In several MVs, participants also reported that PTA meetings had become more regular and more focused on school attendance. Further, the incidence of corporal punishment has declined (though still present) in MV schools.
- E11. Changes in healthcare.** There appears to be growing confidence in the diagnostic ability of the formal healthcare system. Across the board, there were reports of a decline in the numbers relying on indigenous healthcare options (e.g. traditional birth attendants (TBAs), herbalists, diviners, prayer camps and drug peddlers). Participants commonly decried the lack and relatively high cost of accessing orthodox medicines. Across the MVs visited by the PRA team, citizens reported that virtually no infant and under-five deaths had occurred in the last two years. Women's knowledge about pregnancy, exclusive breastfeeding during the first six months, child nutrition, family planning and childhood killer diseases has improved not only in MVs but also in many CVs where the state is delivering CHPS services. However, knowledge has not always translated into practice (e.g. grandmothers were said to sometimes disregard the advice on exclusive breastfeeding; bed nets were not being used correctly).
- E12. Changes in agriculture.** MVs are generally ahead of their comparator CVs in respect of agricultural production. Quite consistently, women and poorer groups in the MVs noted improvements in their ability to access tractor services. Another important gain associated with MVP's facilitation of tractor services is that farmers are now surer that they are not receiving short measure when they pay for their farms to be ploughed. MV households are, however, ambivalent about improvements in their access to veterinary services. In particular, the MVP's "pass on the gift" livelihood support scheme did not really work, and an unintended effect of MVP's agricultural support has been a decline in the vibrancy of informal, rotational labour groups. Plus, the recovery of the input credits distributed to MV farmers in the first year of the project was more successful where it was done through farmer cooperatives – though with few exceptions, the farmer groups formed in the MVs did not quite graduate into true cooperatives.
- E13. Changes in sanitation.** An initial improvement in sanitation was reported in several of the MVs, following support by the project towards the construction of household latrines. However, in several of the focus group interviews, participants reported that they had been threatened with potential sanctions if they failed to cooperate with the latrine initiative. Many said that this

component had been implemented hastily and they feared that the latrines might collapse on them. As a result, many of the toilets were already experiencing disuse.

E14. Changes in infrastructure. Roads that were previously impassable or not accessible by vehicle have been improved, with positive benefits. There have, however, been some perverse outcomes of the road improvement effort – such as children in several CVs skipping school to provide portage services at the increasingly vibrant markets and transport terminals. Also, where grid electricity has been extended to communities, a range of petty businesses are also springing up. These include selling of ice water and chilled beverages (mainly women), retailing and installing electric appliances (young men), and operating commercial grind mills (rich men). However, the team also encountered some evidence of lapses in the quality of some of the infrastructure delivered. At the MV6 CHPS facility, for example, floors in the extension constructed by the project have already failed and are showing major signs of pitting while the floors of the older section remain intact. The rendering of walls at the MV4 CHPS compound are already peeling off the blockwork. At MV2, a small-town water system installed by MVP in 2016 had already broken down four times since the project ended. The home latrines financed by the project also lack vent pipes to redirect odours away from the enclosure, and participants in some MVs reported that the pits were only waist deep.

Sustainability

E15. Partner engagement. The quality of community engagement by MVP appears to have been relatively weak. While some discussions were indeed held with participating communities at various stages of the project, the process tended to be hasty and mechanical, lacking the reflexive-ness and patience that working with illiterate rural communities often requires (e.g. the latrine component).

E16. Teachers. The replicability of the teacher allocation arrangement from which MVP benefited is debatable. The improvement in learning outcomes in MV schools has been largely on the back of the superior pupil/trained teacher ratios (PTTRs). To the extent that the trained teacher resource is a fixed one, however, the enhancement of PTTRs in MV schools was possible only because potential resources were shifted away from non-MV schools – and not sustainable or equitable.

E17. Community health workers. The sustainability of the CHW initiative was a recurrent concern throughout the course of the MVP. Both the frequency of their home visits and their effectiveness are perceived to have dropped already following the formal (and very recent) closure of the project.

E18. Community-based health planning and services. In the view of the Ghana Health Service, the MVP version of CHPS misinterprets the philosophy underpinning the concept and has no place in their hierarchy of facilities. The superior levels of service purported by these “super CHPS” facilities cannot be sustained when the levels of provision are not aligned with the public budget. There have been some reports of ambulance services suffering since the closure of the project.

E19. Water. There have been issues with some of the water systems as well. By May 2017, a small-town water system installed at MV2 in 2016 was non-functional, with no clarity on how the repairs would be financed.

1. Introduction

Evaluation background

1.1.1 The Millennium Villages Project

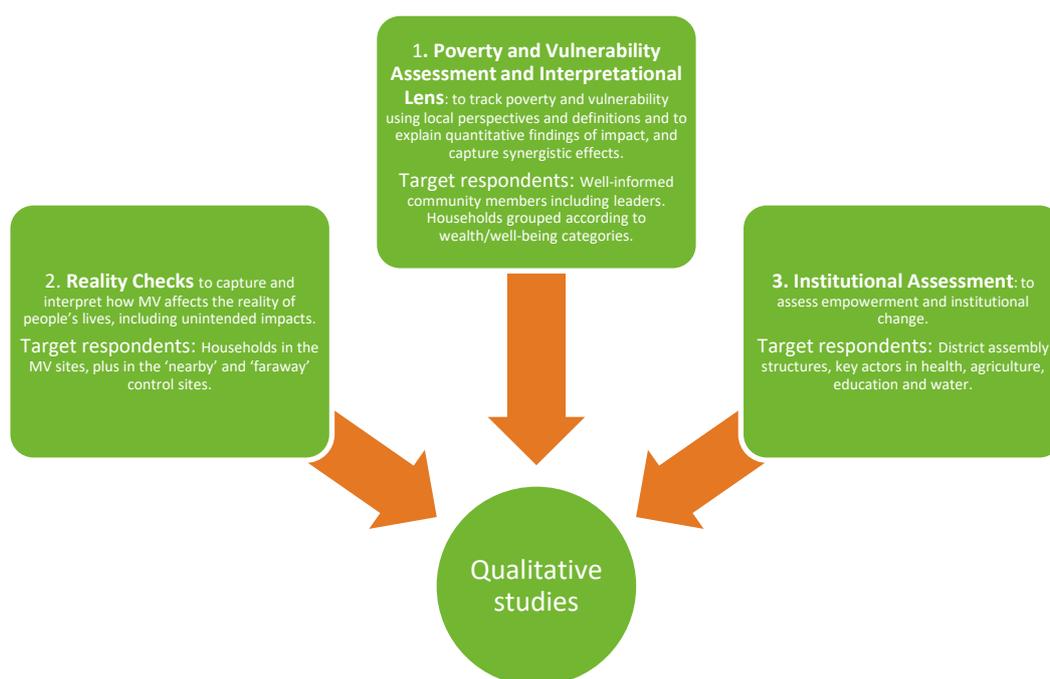
1. The Millennium Villages Project (MVP) was designed to show how an integrated approach to community-led development can translate the Millennium Development Goals into results in sub-Saharan Africa. The MVP model provides an integrated package of interventions aiming to lift rural communities out of poverty. The central hypothesis is that addressing immediate capital deficiencies in communities and households through a “big push” will provide the necessary conditions to move towards local resilience and self-sustaining economic growth. The MVP was piloted in Kenya (Sauri) and Ethiopia (Koraro) in 2005 and then launched at scale across ten countries in 2006.
2. The Millennium Promise approached the UK Department for International Development (DFID) to finance Millennium Villages (MVs) in northern Ghana in a cluster of communities in three districts¹ of up to 30,000 people. DFID agreed to support the MVs alongside an independent impact evaluation. DFID aims to provide evidence to guide further development interventions in northern Ghana, influence development policy in Ghana and inform the international debate on the effectiveness of the MV model (Masset, E., Jupp, D., Korboe, D., Dogbe, T., Acharya, A. and Barnett, C., 2013).

1.1.2 The independent impact evaluation

3. The independent evaluation of the MVP is based on quantitative and qualitative data. The qualitative component is made up of three separate but interconnected studies, of which this participatory rural appraisal (PRA) study is one (Figure 1). The PRA focuses on the experiences of citizens in seven MVs and their control communities.

¹ West Mamprusi, Mamprugu Moaduri and Builsa South districts.

Figure 1: Millennium villages evaluation: qualitative components



Purpose

4. This report summarises the findings of a PRA endline study undertaken between March and April 2017 as one component of the independent impact evaluation of the MVP in Northern Ghana. As with the previous rounds of the evaluation (base and mid-line), the focus groups comprised four broad categories distinguished by sex and wealth/well-being. Across the communities visited, food security was the dominant marker by which citizens distinguished their well-being categories. The four broad well-being cohorts identified and interviewed were:
 - rich/moderately rich men;
 - rich/moderately rich women;
 - poor/very poor men;
 - poor/very poor women.
5. This endline PRA is one of three studies making up the qualitative part of the independent evaluation of the Savannah Accelerated Development Authority (SADA) MVP commissioned to take place from 2012–16. The reports from the three qualitative studies seek to provide an understanding about the qualitative changes that have happened in the MV cluster and control areas, as well as serve as an interpretational lens on the quantitative data. Deeper cross-referencing of the data from the three parts of the qualitative study with the quantitative data has yet to take place. A synthesised endline evaluation report will be produced once this is done, in which this report will form one of the annexes.
6. The PRA study sought to identify, from the perspective of local residents, qualitative changes perceived to have taken place since the baseline. As an interpretive lens, this round of the study also sought to corroborate, qualify and clarify the findings of the quantitative work, which took place in 2016. Thus, the report attempts to explain how and why change has or has not occurred and what such changes mean to the individuals, households and communities. As a summary, the report is based on the detailed site reports and complemented by reflections from a five-day

debriefing workshop designed to receive and interrogate the researchers' presentations of their findings. Unless stated otherwise, the perceptions and assessments presented in this report are those of the participants interviewed in the respective communities.

Structure of report

7. The report is structured as follows: Following this introduction, Section 2 describes the methodology employed, along with its associated limitations. The next section analyses the reported changes in well-being and attempts to distil the key drivers of change as well as the barriers that have impeded greater progress in well-being improvement. Section 4 then details extensively the changes in specific services – education, health, agriculture, sanitation and infrastructure. This is followed in Section 5 by some reflections on the sustainability of the project's outcomes. Finally, Section 6 draws together the key conclusions of the PRA study. Additional specific findings on changes in children's well-being and women's economic activities are reported in Annexes 1 and 2 respectively.

2. Methodology

Fieldwork process

2.1.1 Timeline, research team and locations

8. The PRA study was undertaken between March and April 2017 over a period of 36 days. The baseline and midline rounds took place between the months of February and March in 2013 and 2015 respectively. The endline fieldwork was slightly delayed, but still took place in the dry season and before the onset of the traditional hunger season.
9. The research team comprised 20 research assistants supported by a research trainer/coordinator and a lead writer. To the extent possible, the study worked with the same research assistants who had been recruited for the baseline and mid-line rounds. Where this was not possible, new recruits were identified. A three-day workshop complemented by a one-day hands-on trial of the research protocol at CF3 served as training for the newer researchers while providing an opportunity for the older researchers to refresh their skills. Following some screening, the 20 researchers selected were constituted into four teams and assigned to the sampled sites based largely on their familiarity with the respective languages.
10. Each of the four teams conducted three sets of interviews in their assigned communities. The interviews comprised:
 - Focus group discussions with the different well-being categories established at the baseline, using the following PRA tools:
 - Well-being ranking to identify which households had moved up or down or kept their rankings over the evaluation period;
 - Scoring (and occasionally ranking) to assess changes in consumption and income;
 - “Ten-stone” method to elicit changes in proportions of boys and girls attending school;
 - Institutional mapping to assess changes in how the priorities and knowledge of the poor and vulnerable have been incorporated in the programmes, plans and budgets of external agents such as MVP and the district assembly;
 - Matrix scoring with well-being categories to assess changes in the provision of health services in the community;
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 - Focus group discussions on similar issues with the following stakeholders: community leaders, children from households representing the different well-being categories, parents, Parent-Teacher Associations (PTAs), district education officials, teachers. Some children from Primary 6 were also selected randomly to test their reading of the Primary 6 reader.
 - Key informant interviews with some individuals who had fallen into or exited poverty, teachers who have been in the community the longest, traditional leaders, PTA members, community health nurses and volunteers, traditional birth attendants (TBAs), bone-setters, drug store keepers, agricultural extension workers and prominent farmers.

11. In all, the research team visited 20 field sites. These comprised seven MVs in which the MVP had intervened and 13 quasi-identical control communities – seven nearby control villages (CNs) and another six faraway control villages (CFs).²

Table 1: Sampled sites

MV ref.	MV name	Comparator nearby control community (CN)	Comparator faraway control community (CF)	Research team's comment
Mamprugu ³ sites				
MV1	Nabari ⁴	CN1	CF1	CN1 is a section of a larger community; for many of its residents, it is a secondary home where they settle cyclically for months at a time to farm along the fertile river banks
MV2	Kunkwa ⁵ (Central) ⁶	CN2	CF2	MV2 (Kunkwa) is a Buili-speaking community in a Mampruli district
Bul'k ⁷ sites				
MV3	Zuasa	CN3	CF3	MV3 (Zuasa) is the most central section of Uwasi rather than a separate community; CN3 is the central section of a larger community
MV4	Zamsa	CN4	CF4	MV4 (Zamsa) is more a section of Wiaga than a separate community; CN4 is a section of a larger community
MV5	Kasiesa	CN5	--	CN5 is a section of a larger community; the original CF5 was excluded from the study as it was found to have been included in the baseline in error
MV6	Gbedembilisi ⁸	CN6	CF6	CN6 and CF6 are sections of other larger communities
MV7	Naadema	CN7	CF7	CN7 and CF7 are sections of other larger communities

² The village sample is short by one because one CF visited at the baseline was found to have been included in MVP's database in error.

³ Mamprugu is home to the Mamprusi; their language is Mampruli.

⁴ Also spelled Nabare.

⁵ Also spelled Kunkua.

⁶ Kunkwa is a large and dispersed settlement. After consultation with the community leadership, it was decided to use the central part of the settlement for the studies.

⁷ The land of Bul'k (or Buluk) is home to the Balsa (or Builsa; singular Buloa) people, whose language is Buli (or Buili).

⁸ Also spelled Gbedemblisi.

2.1.2 Data collection

12. The categorisation of the focus groups was informed by a prior well-being ranking exercise conducted at the baseline in which community representatives compiled locally relevant descriptors of well-being for their community and matched those descriptors with well-being strata. In addition to the four recurring categories of rich, moderately rich, poor, and very poor households, a small minority of communities also identified either a “super rich” or “destitute” stratum. To enhance the tracking of qualitative changes and promote local learning from the evaluation process, the composition of the focus groups interviewed at the baseline was maintained throughout the evaluation.
13. The study built on the areas of conversation outlined for the earlier baseline. These were refined and augmented by specific areas of interest flagged by the quantitative strand of the research for deeper inquiry.

Data analysis

14. Much of the data analysis took place in tandem with the fieldwork. Throughout the period of interviewing, the teams tried to make time in the evenings to reflect on the information they were receiving and to identify apparent conflicts in the data. Gaps and findings that required further investigation were then flagged and strategies devised for further investigation during the remaining fieldwork period. The strategies typically comprised additional observation, limited repeat interviews to drill deeper, and targeting appropriate key informants to interview.
15. At the end of the fieldwork period, an intensive five-day debriefing-cum-analysis workshop was held with selected research assistants and team leaders, the research coordinator and the lead writer. The workshop critically interrogated the provisional findings, and began to distil the similarities and differences between MVs and CVs, between well-being cohorts, and between sexes. It also flagged up apparent inconsistencies and gaps as well as errors for further attention. The respective teams followed up on these areas with the communities and/or relevant institutions. Two meetings were also held between the study leaders and the SADA-MVP transitional team in Bolgatanga to seek further clarifications.

Limitations

2.1.3 Limitations with fieldwork

16. One major challenge encountered during the fieldwork in the Builsa area was the performance of funerals. The timing of the fieldwork coincided with the customary period for observing funerals in that area. This made mobilisation of focus group members quite challenging. On occasion, interviews had to be shortened or rescheduled to later dates as targeted participants had travelled to neighbouring communities to participate in funeral ceremonies lasting several days.
17. Further, at the time of the study, farmers had begun to prepare their farmlands, making it difficult to get them to participate fully in the focus group discussions. Sometimes, participants would rush off to their farms before a discussion had been completed.

18. In some communities, the distribution of the monthly grant by the Livelihood Empowerment Against Poverty (LEAP) programme either disrupted focus group discussions or made it difficult to mobilise the poorest members. In one control community, the research team had to reschedule the meeting twice because the beneficiaries had to travel to the district capital to claim their allowances.
19. Not unusually, the research teams were confronted with interruptions by citizens who felt they should be included in the focus group discussions merely because they were resident in the village. They complained that the team had been meeting the same group of people over the five-year period.
20. Communities in the Mampruli-speaking areas were remote and road conditions had worsened, sometimes rendering the regular access ways impassable.
21. The teams also encountered research fatigue among participants in both MVP and control communities. However, it was worse in the latter, particularly with individuals who felt they were not getting direct benefits.
22. CN1 had a peculiar situation. Apart from the road being in terrible condition, participants are seasonal farmers who relocate there for a period and go back to their original communities after the farming season. At the time of the study, the majority had not yet arrived and the team could not meet all the focus group participants interviewed at the base and mid-lines.

2.1.4 Limitations with data analysis

23. The most significant challenge with analysing the data from this study stems from the fact that PRA-based data is largely perception-based. Often too, illiterate villagers struggled with estimating quantities (e.g. of harvests and purchases from the market) correctly. In other cases, respondents erred in attributing various interventions in their respective communities, incorrectly citing organisations or projects they had received support from. Frequently, respondents in MVs mistakenly associated interventions by other actors to the MVP. Furthermore, their counterparts in the CVs sometimes misattributed interventions to other large actors such as the Millennium Development Authority (MiDA).
24. Wherever possible, the analysis sought to address these challenges by triangulating information against other sources within the same communities. In some cases, secondary visits had to be made either to repeat specific questions with particular groups or key informants, or to augment the information with visual observations. Much of a five-day debriefing workshop with leaders of the sub-teams was also devoted to interrogating the interim findings with the view to identifying points of evidence that needed further validation. Ultimately, however, it will be important to interpret the findings presented in this report alongside those reported by the other components of this multi-perspective evaluation.

3. Changes in well-being

Overall well-being

26. **All seven MVs sampled perceived well-being to have improved overall since the baseline**, while conceding falls for some of their households who were not actively involved in the project experiment. By contrast, significant declines were reported at CN1, CN4, CN6 and CF6.⁹ In two MVs (MV2 and MV6) participants also hived off a new category of “super rich” households from the previous rich cohort, reinforcing their perception of some significant well-being improvements having occurred over the lifespan of the project. This new category tended to include those who have been able to acquire expensive tangibles such as tractors. The faraway control villages did not appear to be worse off than the nearby controls.
27. Across MVs, groups interviewed specifically alluded to improvements in food security, with a discernible shortening of the hungry season – from around five to six months at the baseline to between three and four months at the endline. There is also less compulsion for their young men and women to migrate to the south, where they often endure prejudice and mistreatment, homelessness and threats to personal safety, and various other forms of adverse incorporation. With the decline in out-migration, MV households are also relying less on remittances to tide the hungry season.

Livelihoods

28. **There has been a surge in the cultivation of maize – particularly in MVs, but also in CVs.** Previously farmed on a very small scale and considered a “backyard crop” in most parts of the project area, maize is now being cultivated on a larger scale than millet (the dominant traditional staple) in many MVs, following education by MVP on its potential not only for food security but also income generation. In several control communities, farmers are also switching to maize after observing that maize offers a superior yield by comparison with millet. At MV4, for example, the increasing availability of food was captured by a participant in a focus group, who opined: *“nobody who grows maize runs out of food [anymore].”* Many of the women interviewed also felt that maize has more culinary uses than its rival, millet. Some focus group participants in the control communities mentioned that Ministry of Food and Agriculture (MoFA) and the Presbyterian Agricultural Station (PAS) have been active in promoting a switch to maize cultivation, based on its superiority in terms of food security. Curiously, farmers at CF1 said one reason they were substituting maize for millet was because their sons were now attending school regularly and were no longer available to chase birds off the millet fields. However, the relatively high cost of fertilisers and tractor services continues to constrain the ability of the poor and women to participate effectively in maize farming.
29. **Farm sizes too have increased in MVs (also in CVs, but less markedly) – for men as well as for women, and even among some poor households.** In MVs particularly, the expansion in farm size owes much to the improved availability of tractors in those communities. In the words of one woman in a focus group discussion with rich women at MV4, *“nobody can use the hoe to turn the*

⁹ While this may appear like nearby controls are worse off, the numbers are too small to permit a conclusive statement.

soil on ten acres [of farmland]". Some of the wealthier farmers also said they had purposively enlarged their farms or relocated to more spacious fields farther out to make space for maize alongside the millet they have traditionally farmed (also at CN3). Inspired by the relatively high return on maize cultivation, some wealthier farmers now import tractor services from as far as Ejura (in Ashanti Region) to make certain that they can complete their land preparation routines on time. More women in the MVs also reported having their own farms – even if they still lack full control over the harvests.

Migration

30. **In general, there appears to be a slowdown in migration.** In most MVs, youths who migrate during the agricultural slack season now return earlier than they did at the baseline.¹⁰ Various factors (including new opportunities in the project area as well as steeper hurdles in finding work in the cities) were cited by the focus group participants as explaining this trend. In the majority of communities (even CVs), livelihood opportunities have improved. In several cases, the new opportunities derive from recent investments (such as roads) by MVP or the introduction of higher-return crops (such as maize) or new skills (e.g. in the area of cowpea cultivation/double-cycle cropping). Simultaneously, opportunities for push-truck and head portage work (*kaya*) have reportedly been declining in recent years owing to the increasing access to motorised tricycles as an alternative means of transporting small quantities of cargo in urban areas. Increasing access to second-hand mowers was also cited as undermining opportunities for lawn maintenance work in the cities. However, migration has increased from some communities where well-being has dipped. An example is CF6, where previously lucrative artisanal gold mining is no longer brisk. Households affected by the dip in mining said the relief from migrant remittances is unable to compensate for the loss of mining income.
31. The reduction in out-migration from MVs as a whole has had some positive impacts on the quantum and quality of agricultural labour available. MVs have also reportedly become less dependent on migrant remittances as a means of plugging foodstuff deficits and financing household agricultural activities. In MV6, some citizens associated the noticeable decline in "*strange diseases*" (such as HIV, which previously compelled families to spend heavily on repatriating their migrant members) with the slowdown in migration.

Utilisation of surplus produce¹¹

32. Subsistence agrarian communities in the savannah have traditionally used grain barns and free-range livestock as a means of holding surplus produce and income against a rainy day or towards some targeted expenditure. This is not surprising, considering that banking services remain inaccessible to many owing to long travel distances, high levels of illiteracy, lack of familiarity with the formalities of the banking sector, etc. At CN7, for example, a participant in the focus group of rich men described the community's livestock as "*our bank*". As indicated in Section 4.1.16, funerals too continue to take up significant shares of surpluses in most households.¹²

¹⁰ It is also increasingly common for them to leave later, only after beans have been harvested.

¹¹ Unless reported otherwise, the observations in this section generally apply across MVs and CVs.

¹² The costs include expenditures on food and drinks as well as new fabrics for women.

3.1.1 Food and livestock surpluses

33. **There appear to be some differences between rich and poor, and between men and women regarding how their surpluses are applied and when.** While both rich and poor households do store cereals for which they do not have immediate use, the rich are more likely to dispose of their stocks when prices are high and in bulk, while the poor sell regularly and in small portions – to finance petty household needs as they arise. Often, poor households must also sell an initial portion of their produce soon after the harvest to pay off their debts before any notional surplus can be saved. Men have generally kept ruminants¹³ and targeted their savings towards house building (or improvement/ extension)¹⁴ and farm expansion while women have traditionally kept fowls as a strategy for shoring up their households' resilience against adversity.
34. **It seems somewhat ironic that many in the focus groups said they sell their surplus cereals (owing to the threat of insect infestation) to buy livestock, at a time when livestock diseases and deaths have been increasing.** It appears that it is mainly the rich in the MVs – with the means to apply the veterinary knowledge acquired from MVP to improve on their animal housing and pay for vaccinations – who really benefited from that component, and who have been able to continue investing in livestock. In some communities, rich men noted that they feel somewhat constrained to hold on to surplus harvests and livestock (rather than dispose of them) because of the prestige associated with having visible surpluses.
35. **Over time, and with sustained interventions by non-governmental organisations (NGOs) and externally facilitated projects, gendered differences have been gradually waning and more rich women now own small ruminants** – typically goats (which are widely perceived as being hardier than sheep). As these assets are primarily kept towards funding *household* priorities such as healthcare, agricultural capital, funerals and children's education (as opposed to personal or everyday consumption), women will often seek their husbands' consent (as heads of their households) before disposing of their birds/livestock. In households and communities where cultural restraints still make it difficult for women to keep livestock (e.g. CN3, CF3), women may use their surplus income to acquire fowls and small ruminants in the names of their male children.

3.1.2 Savings

36. **Over the evaluation period (last five years), men have increasingly reported saving towards acquiring tractors and motorised tricycles,** particularly in the MVs. These serve as commercial capital; and the tricycles especially are used as rural transport – to cart farm produce, passengers and water for a fee. Previously, bullock ploughs and donkey carts would have been the targets for those wanting to invest in tillage and rural transport.

¹³ The largest ruminants (cattle) are typically held by the rich.

¹⁴ A common improvement would be upgrading from a thatch roof to one made from corrugated metal sheets. Another common improvement is to render the external walls in a cementitious finish – both as a status statement and as protection against erosion. Previously, some rich households shied away from building cement homes for fear of attracting spiritual attacks from their enemies. This fear was reported to be waning as a result of evangelisation by various church groups. Some of the rich said they invest their surpluses in rental housing in the larger towns (e.g. Fumbisi, Sandema, Walewale and Tamale); at MV6, some rich men also invest a portion in health insurance for their households.

37. **In relative terms, men are also more likely than women to save with banks – even if this remains the minority situation.** In some communities where Bucobank staff are taking their mobilisation services to the villages (rather than expecting citizens to carry their money to the bank) (e.g. MV7, CN7), relatively more of the poor now keep bank accounts. Richer men generally cited GHS 1,500–2,000 as the size of surplus that would influence them to send their money to the bank, whereas poorer men quoted GHS 500–1,000. Some rich men at CF1 said they also saved in the electronic wallets now operated by Ghana’s mobile phone companies. The norm for women – except for the richest among them – is still to save at home, often in the form of petty livestock. Consistently, the wealthier focus groups (especially the men) also said they set a portion of their surpluses aside to renew National Health Insurance Scheme (NHIS) subscriptions for their households.

Drivers behind the well-being improvements

3.1.3 Agriculture

38. **Among the project’s varied agricultural interventions, it was perhaps the improved know-how on (i) planting in rows; and (ii) correct spacing of plants that benefited the poor the most.** Farmers in the MVs generally perceive the partnership with the MVP to have improved their access to agricultural know-how, fertiliser, credit capital, tractor services and quality seed. Visits by MoFA’s agricultural extension agents (AEAs) also became more regular in several MVs (e.g. MV6, MV7). Others in some riverine communities – MVs as well as CVs – acquired treasured knowledge on how to intensify the use of their lands through double-cycle cropping, leading to some significant improvements at CF1, CN2, MV3 and MV6.
39. **Quality of facilitation support also appears to be important in determining outcomes.** Thus, in several control communities where the specific sectoral gains have been comparable to those in MVs, the PRA team found that competent – though less-endowed – organisations (e.g. PAS) had been present, coupling limited supplies with diligent coaching. At CF7, for example, where an Agricultural Development and Value Chain Enhancement (ADVANCE)¹⁵ intervention shared knowledge with farmers but provided no physical inputs whatsoever, the farmers involved in the initiative were reported to have noticeably increased their yields.
40. **In some other control communities (e.g. CN3), the improvement in food security was attributed to influences (such as row planting, proper spacing of plants, correct timing and dosage of fertiliser, and weedicide application) which farmers had picked up from nearby MVs or other initiatives.** Based on learnings acquired from hiring out their labour in the fields at MV2, farmers in CN4, for example, are now growing more cowpea and on dedicated plots (rather than combining it with millet on mixed plots). Others (in project as well as non-project communities) identified the five-year MiDA effort (which preceded MVP and closed at the beginning of 2012), as well as Technoserve and ACDEP¹⁶ interventions as the sources of the agricultural know-how that had influenced their improved farming practices. In other communities where MoFA extension workers have been relatively active (e.g. around CN3 and in MV5), some women are

¹⁵An initiative of US Agency for International Development.

¹⁶ Association of Church Development Programs.

also trying their hand at new quick-maturing and high-yielding varieties of rice and groundnuts, which are being promoted by MoFA. PAS too had led the way in agricultural efficiency with their experiential training in the use of heuristic bags to prevent post-harvest losses. In addition, PAS also promoted the Zai method of organic spot manuring¹⁷ and stone bunding as ways of optimising available assets while retaining soil moisture around cultivated plants.

41. **The introduction of maize has been a singularly significant factor in addressing food security challenges in MV households.** A participant in a focus group of rich men at MV4 observed: “we have kicked out hunger from here.” In the assessment of one executive member of the farmer cooperative in that community: “we [no longer] have to sell our animals to buy food for our families; animals are [now] sold to pay SHS¹⁸ fees and hospital bills.” Not only are maize yields considerably higher than they are for millet (its main competitor crop); because of its shorter gestation period, it also works out to be more resilient when rains are inadequate. However, credit for this shift may be shared by PAS and MoFA; MVP built on and intensified these earlier efforts in promoting maize cultivation and good agricultural practices, with its vastly superior finances.
42. **The improvement in tractor access has made a difference to farming in MV communities.** With some rich individuals beginning to invest in commercial tractor services, more of the poor and women in the MVs are now able to acquire tractor services in a timely manner – even if many of their peers still cannot access those services because of the costs involved. Still, by comparison, poor households in CVs have greater difficulty accessing tractor services. Just as was the case in MVs at the baseline, the CV poor often have to wait till the farms of the rich have been ploughed, because the latter have greater economic power. By the time the tractor operators are done with ploughing the relatively large fields of the rich, it is often too late for the poor to start preparing their lands. However, the CV rich do not appear to be as constrained in accessing tractor services, often from nearby MVs. At CF4, where access to tractor services has improved significantly (with nominal prices even lower than at the baseline), many poor households have been able to expand their holdings, enabling them to exit poverty.
43. **The intensification of agricultural education over the years by a diverse range of actors (including MVP, PAS, Technoserve, MoFA, MiDA, ACDEP and ADVANCE) has increased the appetite for mechanised ploughing services.** Many of the tractors currently providing services are reported to have come into the area from faraway towns such as Tumu (in Upper West Region) and Ejura (in Ashanti Region), as well as from nearby towns and villages such as Sandema, Wiaga and MV2. At CF4, tractor operators are charging a relatively modest GHS 60 for ploughing an acre, compared to GHS 70 at the baseline when the few tractors enjoyed a monopoly in the ploughing services marketplace. In parts of the project area, the rise in the tractor population has also resulted in freeing up the stock of traditional bullock ploughs for poorer farmers.

¹⁷ It is reported that spots manured using the Zai method have remained fertile for up to three years when augmented with a nominal top-up dressing of chemical fertiliser.

¹⁸ Senior High School.

3.1.4 Village Savings Loans Associations

44. **The Village Savings and Loans Associations (VSLAs) promoted by the project have been instrumental in mobilising women’s savings and raising their confidence to engage and negotiate in the marketplace.** In several MVs, VSLAs are reportedly assisting women to raise capital with which to expand their farms and microenterprises such as *pito* brewing and petty trading. Women noted that, beyond expanding their operations, the VSLA is also assisting them to access ploughing and other services more effectively and in a timelier manner than before. In a focus group discussion with poor women at MV3, one woman observed, “*We didn’t know we were rich until we started [the VSLA].*” Interestingly, the intervention has been one of the least expensive facilitated by the project, according to the MVP transition team.
45. **Outside the MVs too, VSLA is gaining in popularity, though it tends to be implemented less rigorously and effectively.** There are allegations of the concept being adulterated by banks (e.g. Bucobank), NGOs (e.g. ORGIS¹⁹ Ghana) and local politicians who fail to insist on compliance with the scheme’s carefully-thought-through bylaws. Examples are the several new *Amaachaab*²⁰ groups found in the CVs (e.g. CN6). It is also important to acknowledge that in several communities (e.g. MV7), the VSLA built on the more traditional *susu* (thrift savings cum rotating credit) scheme, which had been running prior to the arrival of MVP.

3.1.5 Infrastructure

46. **The improvements in road infrastructure²¹ were widely reported to be having a particularly positive effect on enterprise development.** Study participants in both MVs and non-MVs spoke of how much more vibrant certain markets along the improved corridors have become, how new ones have sprung up and how some occasional (typically weekly) markets are now operating daily (e.g. MV1). Farmers at CF3, for example, observed how much easier it is for them to sell their produce as it is now more convenient for cargo trucks to get close to their village and for residents to reach the brisk markets at Fumbisi (some 25 km away) and Sandema (about 11 km away) with their crops.
47. Other benefits were attributed to the improvement in roads. For example, the relatively wealthier farmers at CN1 noted that it was now easier for them to access tractor services following improvement works on the road linking their community to Pwalugu. Poor women at MV4 and CN6 said they now have a supplementary livelihood in scavenging for pebbles and small stones to sell to builders, while their counterparts at MV1 said they are producing more charcoal as more cargo trucks are passing by their community. At CN1, the market for charcoal and shea nuts was observed to have improved for women.

3.1.6 Other factors

48. **In both MVs and CVs, some poor beneficiaries of the state-run LEAP initiative have been able to start up small enterprises** in livestock rearing and petty trading. The focus group discussions

¹⁹ Organisation for Indigenous Initiative and Sustainability.

²⁰ *Amaachaab* is a Buili word translating as “*helping each other*”.

²¹ The most cited improvements were in the form of culverts.

suggest that LEAP has been instrumental in moving a minority of previously poor households (who invested their stipends in small income-generating ventures) out of poverty (e.g. in MV4 and MV7). For many others, it has also enhanced resilience in the hungry season (CN3, CF3). These findings are consistent with evidence from other micro-assessments of the LEAP programme.

Barriers to change

3.1.7 Environmental challenges

49. **The increasingly capricious climate is, perhaps, the most consistent barrier to progress mentioned in the communities visited.** This is not surprising, considering that livelihoods across the project area are dominated by rain-fed smallholder agriculture. During the five-year evaluation period, erratic rains denied many farmers the healthy returns they expected from their toil. Almost everywhere, but especially among the poorer groups interviewed, residents complained about the rains arriving late yet stopping early (or sometimes flooding their fields – e.g. CN1, CN2, CF2, CN3, CF4, CN5, CN6), thereby undermining the investments they had made in procuring seeds, fertilisers, loans and other inputs.²² Referring to the last (2016) farming season, one woman in the focus group discussion with poor women at CN4 observed: “*some of us used our reserves to sow up to three times on the same farmland*”. Influenced by such capriciousness in the rainfall pattern, (previous) improvements in the hunger situation reported at the mid-term for CN4 are currently all but reversed, leaving swathes of children to fall back on the forests for wild fruits.
50. At CN1 and CN2, which are located on the banks of the White Volta, **flash floods during the rainy season can be a major source of adversity.** Households at CN1 reported losing canoes and fishing gear to some recent floods, adversely affecting their livelihoods.

3.1.8 Livestock mortality

51. **In the majority of sites visited – both project and non-project communities – farmers reported a rise in livestock mortality rates, most notably in 2016.** This they attributed to an increase in infectious diseases as well as to the increasingly long distances that the animals must travel during the dry months to find fodder and water. Participants noted that their animals are more prone to rustling on such long journeys. Informants also reported that a shift in state policy towards a full commercialisation of veterinary services had hurt the health of their livestock. Previously, MoFA had provided subsidised veterinary services, with its officers visiting communities (if infrequently) without charge. With the withdrawal of the subsidy, poorer livestock owners are either no longer vaccinating their animals or are failing to complete the vaccination courses.²³ However, wealthier households in the MVs (e.g. MV4) appear to have been

²² In 2016, the National Disaster Management Organisation had to intervene when floods destroyed some houses. Each affected household received a sum of GHS 300 as relief.

²³ Vaccination costs are reportedly around GHS 0.50–GHS 1 for a fowl, GHS 3 for a sheep or goat and GHS 9–10 for a cow. The cost of treating an infected wound can be as high as GHS 35.

affected less, as they were better able to convert the veterinary knowledge they had acquired into improved housing and vaccinations for their animals.

3.1.9 Social issues

52. **The out-migration of youthful labour remains a challenge to change in many households and communities** (e.g. CF7). However, migration was reported to have declined in several communities – mainly the MVs (e.g. MV1, MV3) but also some CVs – as people attempt to take advantage of the new/ improved opportunities for farming and microenterprise development. In some of the focus group discussions, the slowdown in migration was partly attributed to the influx of tricycles to the cities, undermining the demand for *kaya* (head porters).
53. **Alcoholism was a further barrier to progress identified in several of the interviews.** The abuse of cheap liquor peaks during funerals and festive periods. However, this behaviour extends well beyond such periods, and the sight of drunken, swaying men and women was quite common on the average fieldwork day. Some of the immediate effects identified by focus group participants included teen pregnancy, selling off saved harvests to finance the drinking habit, indebtedness, loss of esteem and destitution.

3.1.10 Other challenges

54. At MV3, farmers who had been cultivating rice complained of losing their livelihood when they were evicted from the valley for a dam project. However, the dam (which was initiated as part of the 2016 election campaign effort of the National Democratic Congress – NDC) never got completed. Others at CF1 complained of routinely losing crops as a result of unbridled grazing by animals herded by nomadic and settler Fulanis. This situation was said to have worsened following the violent eviction of Fulani settlers from some other districts with their homes razed in the process.
55. **Usurious lending rates were cited in certain communities as locking some households into poverty.** At CF2, for example, it was reported that *“if you borrow one bag of beans, you pay back with three bags when you harvest; if you borrow GHS 120 cash, you pay back with a bag of beans, which goes for around GHS 400 at the peak [of the hungry season]; if you have an acre of land ploughed [on credit], you pay with two bags of maize ... or if it is beans you cultivate, you pay with one bag for every two acres ploughed.”*
56. **Chronic ill health and death of the householder** were identified as further factors that have plunged some households into poverty.

Coping strategies

57. **Households continue to exploit a wide array of strategies to tide the hungry season.** However, in the MVs, fall-back measures were less intense than they had been at the baseline. The poor reduce the size or number of meals they eat and continue to rely on their richer kinsfolk and community members for foodstuffs – either as loans or as gifts. In a minority of cases, households are compelled to borrow from moneylenders at effective interest rates often ranging between 100% and 200% per annum. Households also increase their demands for remittances from their migrant members and exploit whatever natural resources are locally available more intensively.

Thus, children from poorer homes forage for wild fruits and vegetables (such as *kampoak*, *tupola* (baobab) and shea) and young girls face greater temptation to engage in transactional sex. Poor men may hunt for fish in the river beds²⁴ for their wives to smoke and sell, while poor women and their daughters may scavenge for fuelwood or shea nuts for sale.

58. More men and women join in producing charcoal for the local and southern markets (Figure 1). Around MV1, where the chief has openly declared support for the Forestry Commission's war on charcoal production, women have to go farther afield to pursue this activity away from the censorious eyes of the state's agents and the traditional authority. Where there are loose stones (e.g. CN3, MV6, CN6) or rock outcrops, children and women may gather or quarry them for sale to builders. Others (including some children) join illegal gold mining gangs to sustain themselves. At CN3, the youth and poor women mine the river bed for sand to be sold to the construction industry, resulting in flooding during the rainy season and wrecking the bridge on the only road

Figure 2: Charcoal produced from illegal forest lumber

into that community.



59. Another option is to work on the farms of the rich, where such opportunity exists, or to migrate in search of work till the adversity has passed. Out of sheer desperation (but also as a tradition for socialising children), some households give their young girls away to better-off relatives (often in urban areas) as house-helpers in an arrangement known as *doglienta* in the Buili language. In some communities where well-being has declined (e.g. CN1, CN4, CN6), the everyday livelihood

²⁴ The area's seasonal rivers are a valuable source of mudfish (which burrow into the river beds during the long dry season) and catfish (which use the rushes as hiding places). Smoked mud/catfish are commonly found in the roadside markets adjacent to the major tollbooths in the savannah.

strategies of the poor (e.g. hunting, fishing and charcoal production) are becoming short-term coping strategies for the rich.

3.1.11 Negative effects of coping strategies

60. **Many of the coping strategies mentioned have adverse outcomes on households and/or their communities in the long term.** For example, when children spend copious amounts of time away from the classroom because they are hungry or when their rations have to be cut drastically for prolonged periods, it can undermine both their academic performance and their physical growth. When households repeatedly over-exploit their fragile and receding forests to extract the larger trees for charcoal processing, it contributes to further depleting soil quality and hastening desertification of the savannah.
61. In many of the interviews, parents recounted stories of their children being poorly looked after or experiencing inhumane treatment in their foster homes. Not uncommonly, girls who are dispatched into such *doglienta* arrangements end up being sexually abused by males in their foster households. Parents spoke of young girls who migrate or become ensnared in transactional sex getting pregnant and truncating their education ambitions. Young women migrants were noted to return with “strange diseases” – a euphemism for AIDS and other serious infections. Fathers routinely lamented being deprived of the traditional bride-wealth when their young daughters migrate and refuse to return. In some cases, married women who migrate were said to remarry at their destinations or fail to communicate with their families, creating trauma for their husbands and households.
62. Often, children involved in artisanal quarrying or working in pay-dirt pits to extract gold illegally²⁵ unknowingly expose themselves to disproportionate threats to their health and risk curtailing their education. Not only have there been several reports of unstable pits caving in on artisanal miners. In the view of the research team, involvement in illegal activity from an early age has the potential to sear a child’s conscience and dent their respect for the rule of law. Across Ghana, illegal mining has also been responsible for despoiling local ground waters and farmlands, by leaving fields littered with dangerous pits and water bodies contaminated with unsafe levels of hazardous minerals such as mercury and arsenic.

²⁵ Illegal artisanal gold mining is known in Ghana as *galamsey*. There has been a relentless clampdown by the state on this activity since the beginning of 2017, owing especially to its alarming impact on groundwater resources and the fertility of agricultural lands.

4. Changes in service provision

Education

64. **By comparison with what the average savannah school receives from the state, the intervention in the MVs was diverse and generous.** Taking MV1 as a typical example, the community reportedly received:

- a new ten-classroom block to replace a dilapidated structure which had posed a risk to child safety;
- an ICT²⁶ lab within the new classroom block, equipped with six computers, a projector and relevant furniture;
- re-roofing of the school kitchen;
- a six-user toilet;
- veronica buckets for handwashing;²⁷
- rakes, brooms and other tools for maintaining the school grounds;
- stationery, library books and other teaching and learning materials (TLMs);
- continuous supplies of sanitary protection for girls;
- scholarships for needy girls at junior high school (JHS) and SHS;
- inclusion of some girls in annual girls' mentorship camps in Accra;
- four CEWs with responsibility for undertaking community sensitisation activities, following up on absentee children and augmenting teaching capacity at the school;
- training of the PTA executives, School Management Committee, head teacher and circuit supervisor;
- a competitive award for the best teacher.

Figure 3: Veronica bucket being used wrongly by children



²⁶ Information and Communication Technology.

²⁷ A veronica bucket is a mobile handwashing station typically mounted on a wooden or metal stand. It comprises two main parts – a bucket fitted with a tap, and a removable basin to collect the waste water.

65. Further support for the school came from a range of other organisations/projects – Camfed,²⁸ the Girls’ Education Unit of GES, G-PASS,²⁹ and Pumping is Life Ghana³⁰ (a water sector NGO). Camfed provided additional sanitary pads, TLMs and scholarships for girls; the Girls’ Education Unit supplied uniforms to selected needy girls; G-PASS too provided sanitary pads, TLMs and grants to cover mock exams and other school-based levies; and Pumping is Life Ghana co-financed a concrete water cistern for the school. On top of this, GES allocated an additional three trained teachers to the school.

4.1.1 Teachers

66. **MVs had higher endowments of teaching staff, but the research team reckons that this came at a cost to non-MV schools.** It is common knowledge that schools across the rural savannah routinely experience serious staffing challenges, especially with *trained* teachers. However, in response to active lobbying by MVP, GES allocated disproportionate numbers of trained teachers to the project’s schools. As the trained teacher resource is a relatively fixed stock, the preferential treatment given to project schools inadvertently deprived other schools of potential improvements in their trained teacher resources.
67. **The superior teacher situation in MV schools was also a result of the project’s recruiting of CEWs (a paid position) to help fill teacher deficits and to assist with other agendas such as enrolment and retention drives.** Preparedness to live in the community was an explicit condition for recruitment as a CEW, a condition that helped ensure prompt teacher attendance at school. While some CEWs were assisted to enrol onto the Untrained Teacher Diploma in Basic Education professional development programme, others who could not make it on to that programme are reportedly opting out as CEWs, since they are no longer entitled to the compensation which the MVP was paying.
68. **The quality of teaching has improved in some MVs** where observations were conducted and/or children interviewed – e.g. at MVs 1 and 2. By contrast, teaching quality was observed to have declined at their respective control communities, some of which had suffered losses in teacher numbers. Children in MV schools are also more likely to have their own dedicated teacher, unlike in CVs where it is still common for multiple classes to share one teacher. Other factors that appear to have contributed to the superior teacher presence and delivery in MVs include the project’s investment in teacher accommodations (both new-builds and renovations), solar power and teaching resources. By contrast, parents criticised teachers for poor attendance at several CVs. Factors identified as influencing teacher tardiness were weak supervision and dilapidated infrastructure (e.g. CF1).
69. **Parents find the improvement in the teacher situation reassuring and are sending their children off to school earlier (both in terms of age and time of day) than at the baseline.** With more teachers available in MV schools, most classes now have a dedicated teacher assigned to them. The teachers’ housing that MVP constructed in some MVs is also enabling MV teachers to be

²⁸ Campaign for Female Education.

²⁹ Girls’ Participatory Approaches to Student Success.

³⁰ <https://www.cordaid.org/en/partners/pumping-is-life-ghana/>

more consistent and punctual to school. At the baseline, it was common for teachers to commute from distant towns, arriving at school late, often after nine o'clock – a situation that is still common in the CVs.

4.1.2 Teaching and learning materials

70. **Teachers in the MVs said teaching had become easier following the resourcing of their classrooms with TLMs.** Because these schools now have an adequate supply of books, school authorities are allowing the children to take books home. Children are correspondingly finding learning easier and more enjoyable. This is a very different situation from the one the PRA team found at the baseline. However, many of the computers and play items supplied are already non-functional.
71. More children at CF4 have access to schooling supplies as a result of multiple interventions by School for Life, G-PASS, Camfed and others. However, the community's poorer children still scavenge for fuelwood as a means of financing an array of school-based levies including "typing fees" for word-processing examination questions.

4.1.3 Enrolment, attendance and retention

72. **MVs appear to have performed better than CVs in enrolment, attendance and retention.** For a start, the focus group discussions revealed that parents are more willing to send their children to school when they are confident that teachers are routinely present in the classrooms. Teacher attendance in MVs has, in turn, been aided by the investment in teacher accommodations (Section 4.1.1), relatively frequent monitoring visits from the MVP and the district education directorates, and the policy of only accepting CEWs if they were willing to live in the community. PTAs were also more likely to be mentioned in the focus groups in the MVs as following up on absentee children and tracing girls given out into child marriages. The investment in play equipment for young children and sanitary protection for adolescent girls were also identified as contributing factors. Other influential factors include the improvement in access to tractor services and the general improvement in well-being and food security in MVs especially. Boys often mentioned that they now care for their families' animals only after school.
73. **In several of the MVs, PTA meetings were reported to have become more regular (often twice in a school term) and more focused on school attendance.** Some PTAs have developed a School Performance Improvement Plan to assist the community with school monitoring (e.g. at MV1), though it is unclear how effective that has been. However, even in CVs, more children are reportedly attending school because of the supplies of stationery, uniforms and other logistics distributed under a range of other interventions – notably by the Government of Ghana, Camfed and G-PASS.
74. **The incidence of corporal punishment has largely declined (though still present) in MV schools.** This is important, considering that caning was one of the main reasons for children avoiding school at the baseline. At MV1, offences that still attract corporal punishment include taking a mobile phone to school, recurrent lateness and viewing pornography. Teachers complained that GES continues to emphasise the ban on caning without really offering them alternatives. By contrast, corporal punishment remains a common occurrence in CV schools. A group of head

teachers interviewed at CN4 opined that *“some children only understand the language of the cane.”*

75. Unlike most sites where enrolment and attendance were reported to have improved, declines were reported for CF1. This was attributed to a combination of tardiness on the part of school authorities as well as to high levels of corporal punishment. Citizens interviewed noted that the headmistress sometimes stays away from school for a whole month at a time. The community’s only school is a three-bay pavilion, compelling the school authorities to combine classes, even though teachers are not equipped for multi-grade teaching. The resulting lack of inspiration was perceived to be a factor in the unusually high amount of teen pregnancy in that community. Teen pregnancy was also said to be rife at CN6 – influenced, in the view of the community, by the fact that the school has no upper primary section which, would have inspired girls to strive harder to remain in school.

4.1.4 Learning outcomes

76. **Random tests conducted with P6 children by the team of PRA field researchers affirmed an improvement in reading ability across MVs as a whole.** While many P6 children from MVs could read short passages given to them, many of their counterparts in the CVs were unable to read two-letter words like “it” and “of.” Several factors explain the observed improvement. These include significant increases in teacher numbers in MV schools as well as in relevant books and other TLMs (notably phonics-based teaching resources); the provision of washroom facilities and teacher housing; guidance to PTA executives; and dedicated school monitoring. Interviews with children in MV and CV schools suggest that teachers in MVs are assigning their pupils more homework and that children in MVs are finding the schooling experience more inspiring and so are attending more consistently. **Despite the marked difference observed between MV and CV schools, children’s comprehension remains poor even in MV schools.** Also, the impact of the phonics-based intervention was significantly diluted by an age rationalisation policy, which suddenly promoted many children who were not ready for the new classes they had been assigned to.
77. On the surface, results for the Basic Education Certificate Examination (BECE) for CF3 suggest an improvement in learning outcomes comparable to that for its comparator MV (MV3). However, a closer scrutiny reveals that the improvement for CF3 is artificial. The apparent improvement is occurring largely because weak JHS3 students in that community are prevented from registering for the BECE. Thus, only relatively strong students are permitted to write the exam, skewing the average to suggest a strong graduating class. The practice of preventing low achievers from taking the BECE is not entirely uncommon in Builsa South and is largely attributable to harsh queries that head teachers receive from their education directorate when their schools perform poorly in the BECE.

4.1.5 Transition from primary to junior high school

78. **The MVP’s investment in primary schools also resulted in some spill overs at the JHS level.** In MVs where a JHS was within close walking distance of a primary school, the JHS sometimes benefited from the (relatively frequent) monitoring visits. In some cases, where an MV school

had both primary and JHS divisions, head teachers diverted some of the teacher resources and furniture items intended for the primary school to the JHS.

79. In MV6, where the nearest JHS remains some 12 km away, progression from primary to JHS is noticeably weaker than at CF6, which has a JHS within the community.³¹ Some parents at MV6 are compelled to rent rooms in Uwasi for their adolescent children so they can continue their JHS education in that community. This practice exposes such adolescents to undue risk of falling into bad company or experiencing harmful outcomes as they are compelled to live without parental control or guidance.

Health

4.1.6 Formal healthcare services

80. **There appears to be growing confidence in the diagnostic ability of the formal healthcare system.** Over the period of the MVP, there has been a noticeable shift in clients' health-seeking behaviour across the study sites, with an increasing proportion of villagers now claiming a preference for orthodox medicine.³² This is not only occurring in MVs but also in many CVs, which benefited from the Mahama administration's investment (between 2013 and 2016) in CHPS facilities across the north. At MV7, there appeared to be a new appreciation among mothers that measles and chicken pox do not result from spiritual causes or from idolatry. Where CHPS is being provided in the MVs, however, there appears to be a stronger trend towards delivering *curative* services than is the case in CV sites, where the nature of service delivery is more in keeping with the original, more basic concept of primary healthcare and disease prevention.³³ The implication of this deviation from the Ghana Health Service standard is discussed under Sustainability in Section 5.1.6.
81. **Across the board, there were reports of a decline in the numbers relying on indigenous healthcare options** – e.g. TBAs, herbalists, diviners, prayer camps and drug peddlers. At CF3, participants observed that soothsayers are now consulted only when formal healthcare has failed. One poor man noted wryly: *“even the soothsayers now attend hospital when they are sick ... so why would we go to them?”* A woman who previously peddled petty medicines at MV6 has reportedly gone out of business now that the health facility is vibrant. Many of the parents interviewed noted that children in their communities were generally healthier now than they were at the baseline.
82. TBAs too are increasingly referring expectant mums to the formal healthcare facilities, although many women find it reassuring to be accompanied to the formal healthcare facility by their TBA. A group of women at CN4 opined that it was far better to use the services of the formal healthcare

³¹ In terms of education investment, MVP focused on primary schools, with very little attention to the JHS level.

³² However, some (but by no means all) focus groups of poor participants reported being poorly received at the Fumbisi Health Centre and the Builsa District Hospital at Sandema. Health staff members of these facilities were described in words such as *“arrogant”, “unfriendly”* and *“disrespectful towards illiterate villagers and patients in tattered clothing.”*

³³ Awoonor-Williams, J.K., Sory, E.K., Nyonator, F.K., Phillips, J.F., Wang, C. and Schmitt, M.L. (2013). Lessons learned from scaling up a community-based health program in the Upper East Region of northern Ghana, *Global Health Science and Practice*, 1 (1): 117–33.

facilities as “TBAs cannot provide blood or water [meaning infusions] or stop bleeding” associated with a difficult labour. Similar observations were made both in CVs and in MVs, though more households in CVs revert to herbal remedies when orthodox medicines are costly. In Builsa North, the shift in services delivered by TBAs was facilitated by a combination of public education and a verbal contract with the District Health Directorate – a further reason why the shift has also been discernible in CVs. At the time of the mid-term visits, TBAs in the district received a token of GHS 5 and a tablet of soap for each referral, but this has been discontinued.

83. During the active lifetime of the MVP, the tricycle ambulances provided by the project were available exclusively to households in the MV communities. Following the nominal closure of the project, however, these makeshift ambulances have extended their services to other communities beside the MVs. Interestingly, comparable tricycle ambulances provided to some health facilities by Catholic Relief Services³⁴ and Ghana Essential Health Intervention Project³⁵ are conveniently fitted with stretchers, canopies, an extra seat for an accompanying nurse, a first aid box, and provision for hanging a bag of intravenous fluid, while those provided by MVP were described to be considerably more basic.
84. **Participants commonly decried the lack and relatively high cost of accessing orthodox medicines.** This is because while CHPS compounds have become physically more accessible, patients visiting the facilities are often redirected to buy their medications elsewhere. During the project period, CHPS compounds in the MVs received some supplies of medicines from the project. Thus, clients reporting with valid NHIS cards often received free medications. However, that ended with the closure of the project, and residents of MVs acknowledge a rise in self-medication as a coping response.

4.1.7 Community health workers

85. **The home visits by CHWs were highly appreciated. Virtually all households in the MVs studied were covered by such CHW visits by the end of 2016.** However, some CHWs complained of suddenly becoming jobless, with the closure of the project. Some have been recruited into the Youth Employment Agency (YEA) programme, under an initiative to deploy some 20,000 nationwide. However, this arrangement is contestable on the grounds that YEA is intended as a two-year skills development opportunity for youth.³⁶ Thus, CHWs who had already served with MVP for four or more years do not properly qualify for recruitment onto the YEA programme.³⁷

³⁴ Catholic Relief Services provided these under its Rural Emergency Health Services and Transport initiative.

³⁵ These were supplied in the latter half of the MVP lifespan.

³⁶ <https://www.yea.gov.gh/index.php/en/>

³⁷ The YEA program has recently been embroiled in allegations of fraud in the form of criminal payments of “allowances to thousands ... who do not work for the agency” (<http://citifmonline.com/2017/04/20/yea-suspends-allowances-over-fraudulent-payments/>). During the fieldwork, the YEA program was continually criticised for serving as a channel of political patronage and extortion. Informants repeatedly cast insinuations to the effect that, in the run-up to the 2016 General Elections, applicants were routinely required to produce evidence of their membership of the then ruling party (the NDC) as a condition for recruitment onto the program.

4.1.8 Traditional healthcare services

86. **There are, however, some significant exceptions to the overall pattern towards using formal healthcare services.** For example, at CN4, MV4, MV5 and MV6, local bone-setters remain the first port of call for dislocations and fractures as, in the participants' perception, they are more effective than the formal health facilities in managing these cases.³⁸ At MV1 and MV3, too, there is still a high regard for the bone-setting services provided in some nearby villages. Some participants opined that when the health facility treats fractures, it "*sometimes leaves scars, deformities and more complications*". At MV1, women overwhelmingly expressed a preference for the TBA's services, explaining that the midwife is rude and often away from the facility. The role of soothsayers is also changing – shifting more towards providing a medium to ancestors' voices regarding funerals (e.g. CF4, CN6, MV6, MV7). Also at MV7, poor men continue to patronise the services of the herbalist, and the soothsayer may still be consulted to enquire about the cause of an illness and/or the ideal place for treatment, but hardly to seek a cure from him.

4.1.9 National Health Insurance Scheme enrolment

87. **Household decision-making on whether to enrol in the NHIS (or renew expiring subscriptions) is influenced by perceptions of the costs and benefits of enrolment.** For the period when MVP funded the subscription fees for MV residents, few households from the MVs opted out of the NHIS – quite predictably. However, once the subsidy period was over, households began to hedge over renewing their subscriptions. Many complained that they had to travel long distances (at relatively high cost) to reach the centralised renewal centres. Once there, they also encountered long queues. Some told of having to make several back-and-forth journeys before they were eventually able to renew their subscriptions. Indeed, since the replacement of the manual registration system with a biometric one, communities in the Mamprusi area have found it particularly expensive to renew their subscriptions, as their district capital does not have the appropriate equipment for capturing biometric images and producing the relevant cards. Some described the cost of conveying a whole household to Sandema for this purpose as prohibitive.
88. **Others felt that, at around GHS 25, the cost of subscription outweighs the benefits.** Some said they did not use the health facilities during the period when they were enrolled. Others were deterred by the fact that their CHPS compounds hardly ever had medications beyond the most basic, such as paracetamol. Participants often spoke of being told to make additional payments for their prescriptions (usually at private drugstores), even when their subscriptions were active. A minority reported being put off by humiliating behaviours meted out by frontline staff in some referral facilities, notably Builsa District Hospital and Fumbisi Health Centre. Such experiences combined to discourage households from renewing their expired subscriptions. It also appears that the relative effectiveness and non-discriminating nature of the CHPS/CHW outreach services are making it less urgent to seek formal consultations, for which NHIS cards would be required.
89. **In a substantial majority of cases, participants had lost their cards.** Often, this had happened during the 2016 electioneering season, when some politicians went around collecting NHIS cards

³⁸ Bone-setters typically work with herbs extracted from forest shrubs. These are mixed with shea butter and wrapped around the affected limb for several weeks or months, with reportedly impressive results.

with the pretext of renewing the subscriptions for free. Those who gave away their cards typically never got them back.

4.1.10 Health outcomes

90. **Across the MVs visited by the PRA team, citizens reported that virtually no infant or under-five death had occurred in the last two years.**³⁹ Somewhat curiously, the finding for CVs was not particularly different. Indeed, where CHPS services were being rendered in control communities, participants' perceptions of the improvements in health outcomes were not far behind those described for the MVs. Previously, *kanchuinsa* (measles) would almost certainly have claimed at least one life each year in the villages of CN4 and CF4. At MV6, women attributed the improvement mainly to the increased utilisation of bed nets (which some said they received annually during the life of the project), the intensification of childhood immunisation campaigns and the presence of a CHPS compound. Mothers at CN4 also said they had stopped administering *chiwaasa* – a harmful herbal concoction typically made with unsafe water – to their infants, following education and threats by the health workers. That said, the reported statistic of zero infant mortality must be qualified by the culture of *nwankuli* – a tradition whereby infant deaths are not counted, but rather interpreted as the child simply “*returning home to the land of the ancestors*”. In both MVs and CVs, more pregnant women are reportedly visiting their health facilities within their first trimester and taking up antenatal services. More post-partum mums are also reporting back to the facilities if they observe evidence of bleeding. This change was attributed to a number of factors. CHPS compounds have become more readily accessible and, in the case of MVs, better resourced with resident midwives, making it easier for women in labour to receive prompt attention. The tricycles that the project supplied to its villages (Section 4.2.1) also helped women experiencing difficult labour situations to be transported to higher-level facilities where they could receive better standards of care.
91. **Women's knowledge about pregnancy, exclusive breastfeeding during the first six months, child nutrition, family planning and the childhood killer diseases has improved not only in MVs but also in many CVs where the state is providing CHPS services.** Awareness has also risen across both MVs and CVs on the causes of AIDS, Hepatitis B, gonorrhoea and other sexually transmitted diseases. Indeed, in several communities that already had access to functional CHPS services and sustained health education prior the baseline, such changes were already underway by the 2013 baseline visit. Overall (even in CVs), there has been a decline in the practice of giving herbal concoctions to infants.
92. In some communities (e.g. MV1), men are purportedly becoming more supportive of their women's family planning aspirations, with some accompanying their wives when the latter visit the facilities to have family planning devices installed. Previously, most men were reported to have been averse to their wives participating in family planning initiatives.
93. **Knowledge has not always translated into practice, however.** For instance, at MV5, grandmothers (who have traditional responsibility for helping to care for infants) were noted to

³⁹ It is important to explain, however, that this may be a qualified truth. In some cultures of the savannah, the death of a child is not really counted as a loss if this occurs at a very early stage – typically in the first month or so.

frequently disregard the advice on exclusive breastfeeding. Some women observed that grandmothers often give babies water when bathing them, with some even scooping this water from the basin in which the babies are being washed. The focus group discussions suggest that grandmothers are not proactively included in the continuous education which mothers are increasingly receiving at the antenatal and post-natal clinics. Several of the women's groups interviewed also noted that health workers do educate them on good dietary practices during the routine community outreach programmes, but added that they are somewhat constrained from adopting the knowledge acquired because of the history of poor rains and the increasing mortality rate in their animal population.

94. In many cases, bed nets distributed by UNICEF, Ghana Health Service and other organisations are not being used to keep mosquitoes out. In a considerable number of communities (both MV and CV), these nets were observed to have been used to protect seedlings from ruminants (Figure 3). In other situations (typically MVs), they had been used as drapes in the doorways of home latrines recently constructed under the project (Figure 4). Some households conceded using the nets to catch fingerlings in their rivers. Also, on warm nights (which are the norm rather than the exception), it is common for households to abandon their rooms to sleep outside, without relocating their bed nets. Some too complained of itching when they sleep in the nets, particularly on humid nights. However, others insisted that they get bitten before going to bed when they stay up late.⁴⁰

⁴⁰ Funeral and festive periods are particularly notorious for keeping people up late because of the late-night revelling that accompanies such occasions.

Figure 4: Bed net used to protect mango seedling



Figure 5: Bed net used to screen off entrance to latrine



4.1.11 Non-MVP healthcare initiatives

95. **The research found a range of health sector pilots and interventions that had preceded MVP, and which contributed to the continuous improvements observed, not only in MVs but across the wider evaluation area.** These include:
- Substantial area-wide investments in health education/primary healthcare (PHC) and antenatal and post-natal care by Catholic missionaries (commonly referred to as “*the white man*”) stationed at Wiaga, in what was then known as Builsa District;⁴¹
 - UNICEF had also invested in a sustained pilot on child immunisations, vitamin A and D supplementation, and bed nets in the Kassena Nankana District and other parts of the savannah, in partnership with the Navrongo Health Research Centre;
 - In many of the community visits, groups interviewed described how Radio Builsa (a licensed community radio station in Sandema) and Foundation for Integrated and Strategic Development had been untiring in educating citizens on health, hygiene and family planning. In recent years, this public service reportedly received some funding support from the MVP.
96. **Informants frequently acknowledged the passion and dedication with which the above PHC-oriented interventions were delivered.** To the extent that the fruits of development can take years – even decades – to mature, the contribution of these extended efforts cannot be neglected in the discussion of health sector outcomes. It must be mentioned, however, that while the pilots

⁴¹ This was before the district was broken up into Builsa North and Builsa South.

were largely seen as successes, the process of taking the lessons to scale has been more challenging. Some concepts such as CHPS have been diluted, with an increasing emphasis on numbers of facilities rather than process and community ownership.⁴²

97. An indoor residual spraying initiative was implemented across the entire project area in 2015 by AngloGold Ashanti Malaria Control Limited (AGAMal).⁴³ The initiative has been continued in the Mamprugu areas by the US PMI AIRS project,⁴⁴ but it was not repeated elsewhere in the project area.

4.1.12 Explaining the relatively low patronage of health services

98. The evaluation's quantitative strand finds that attendance at health facilities has dropped since the baseline. While this is not disputed by the PRA evidence, the reflections in the focus group discussions suggest that utilisation of health services may *not* be as low as the quantitative data suggest if the visitations and outreach services delivered by health workers were counted as consultations or included in the access equation. Some of those interviewed opined that general improvements in the provision of PHC services (including the education that takes place during home/outreach visits, and the house-level and other off-site immunisation services) have contributed to reducing the disease burden. Similarly, the treatments administered by volunteer health workers on their home visits (in the MVs) were widely perceived as adequate, thus reducing the need for facility-based care.
99. Further, the MVP is known to have supported the District Directorates of Health to conduct district-wide immunisation initiatives and to intensify monitoring, thus benefiting children in non-project communities as well. In Builsa South, the health directorate opted to distribute the MVP-provided incentives more widely than was initially intended thereby extending the benefits to health workers outside the MVs (and indirectly, to their clients). This decision to disperse the benefits was taken specifically to reverse an unintended situation in which citizens from CVs with health facilities had been observed to be opting for the nearby MV facilities instead, thereby increasing the pressure on those services.
100. It is also the case that CHPS compounds are entitled to fewer reimbursements from the NHIA than district-level facilities are for their services. This affects the ability of CHPS compounds to stock up on drugs. Many patients seeking care at their local CHPS compounds therefore find that they need to make an additional trip to the less accessible district capital (or some other town) for their drug requirements. They find this both burdensome and costly, undermining their motivation to utilise the *local* health facilities. As a result, many clients simply head for the district capital without referral, as medicines are more accessible there.

⁴² Proper research into the earlier missionary work at Wiaga would be useful for clarifying the impact of that singular effort on child mortality. However, that is beyond the immediate remit of this evaluation.

⁴³ Participants at MV4 are persuaded that the one-off spraying effort left them worse off, and that "*the mosquitoes returned [after the spraying had ended] stronger than before*".

⁴⁴ US President's Malaria Initiative for Africa Indoor Residual Spraying.

Agriculture

4.1.13 Access to agricultural services

- 101. Quite consistently, women and poorer groups in the MVs noted improvements in their ability to access tractor services.** At the baseline, the story was that the subsidised tractors facilitated by the project were relatively few and the poor were losing out in the competition for access.⁴⁵ Because ploughing is a time-sensitive activity, and with the rich typically having greater economic influence and much larger farms, the poor simply could not have their farms ploughed on time. During the endline interviews, however, MV participants (including their poor and women's focus groups) observed a marked improvement in the tractor population. They explained that the rise in demand for tractor services had led some rich men in the area to invest in the enterprise of hiring out tractors. The investment had been facilitated through an arrangement whereby the previous government of the National Democratic Congress (NDC) party (2009–16) made available subsidised tractors for sale across the country.⁴⁶ An outcome is that farmers in MVs now feel less pressured to queue for subsidised tractor services as the price differential between subsidised and unsubsidised tractor services has reportedly narrowed under the influence of market forces.
- 102. Another significant gain associated with MVP's facilitation of tractor services is that farmers are now surer that they are not receiving short measure when they pay for their farms to be ploughed.** Previously, the overwhelming majority of farmers did not know the acreage of their farms with any degree of accuracy and their estimates could be way off the mark. Thus, farmers were entirely at the mercy of tractor operators to determine the acreage they were charged for. In the process, they were routinely short-changed in their transactions with tractor operators. This began to change with the introduction of the MVP facilitated tractors, augmented by the monitoring support of the project's agriculture staff and MoFA's AEAs who began to devote more time to the MVs, influenced in part by a fuel incentive package financed by the project. As a result of these multiple inputs, farmers in MVs now have a better idea of the size of their farms and are better able to negotiate honest scales with the tractor operators.
- 103. A further implication is that farmers in MVs are likely to be applying their agrochemicals in more accurate doses than before.** Prescribed doses for fertiliser and pesticide application are based on farm size. Thus, when farmers have only an erroneous clue about the size of their farm, it is impossible for them to apply such agrochemicals correctly. The fact that farmers in MVs now have a better idea of the sizes of their farms means that they are better equipped to utilise chemicals more safely and effectively. However, women and poorer farmers benefited relatively less than the rich, who had greater capacity to procure such inputs.
- 104.** Under an intended cascade training arrangement, lead farmers were trained in good agricultural practices. These included proper planting distances, row planting and the safe and effective application of weedicides and fertilisers.

⁴⁵ The subsidy level was in the region of 30%, with the SADA tractors charging GHS 40 per acre while services procured from the private sector were around GHS 60.

⁴⁶ As with many other items that were rationed, there were widespread rumours of allocations being influenced by patronage politics and graft.

Box 1: MVP fertiliser delivery strategy

In 2012, the first year of the project, MVP received a donation of fertiliser which was distributed to farmers through the AEAs. The intention was to build a revolving fund replenished through the recovery of the input credits. MVP describes the recovery rate as “quite good”.⁴⁷

In the second year, the project opted for a different delivery approach. This approach entailed facilitating the cooperatives to access the fertilisers through bank loans guaranteed by the project. However, a combination of adverse factors – notably poor rains, late arrival of the subsidised tractors and delays in the distribution of the fertiliser – led to lower-than-expected yields and made it difficult for many farmers to honour their repayment commitments. Many farmers (particularly those met in the poorer focus groups) also said they had not been aware that the inputs were anything other than handouts.

Because MVP had guaranteed the fertiliser loans, it had no choice but to pay off the indebtedness of the large number of farmers who were unable to meet their repayment obligations. The result was a sudden depletion of the revolving fund.

The project was compelled to explore yet another approach in the third year. Potential local entrepreneurs who demonstrated some basic capacity to run agricultural inputs shops were identified and supported with training in enterprise development. The entrepreneurs were also assisted to network with relevant wholesalers.

105. **The project’s “pass on the gift” livelihood support scheme did not really work.** Under a revolving “pass on the gift” arrangement, MVP gave out ewes in its settlements, with community members participating in identifying the first beneficiary.⁴⁸ That first beneficiary was expected to pass on the offspring to other households in the community. However, except in MV3, participants in the seven MVs visited reported that the animals died. Under a separate arrangement, goat gifts were made to some of the most destitute households. Goats were chosen because they are hardier and need very little attention. Recipients of the goats (destitute households) got these as outright gifts and were not required to pass on the offspring to other community members.
106. **An unintended effect of MVP’s agricultural support has been a decline in the vibrancy of informal, rotational labour groups.** At MV6, for example, residents observed that the *Akanseyeri* and *Aweelimaari* associational arrangements have become dormant as increasingly more farmers switch to the use of tractor services and agrochemicals on their farms. In the control villages, it is the relatively high cost entailed that was said to be responsible for eroding the practice. A farmer requesting such group labour support has to have *bulk* funds to finance the cost of a filling lunch, a ruminant to be slaughtered and shared among the helpers, and a generous amount of local gin (*akpeteshie*) for each helper.

⁴⁷ Meeting held between representatives of independent evaluator’s PRA team and MVP transition team, 5 June 2017.

⁴⁸ At MV6, for example, the first beneficiary was identified by balloting ten active farmers. Farmers who had failed to repay earlier input credits were excluded from competing at MV4. As it was the rich who were able to repay those loans, the approach adopted automatically skewed the selection in favour of the rich.

4.1.14 Extension and vet services

107. **With MVP's influence, MoFA agreed to transfer some AEs from other areas to provide dedicated support to their impact groups and, later, to lead farmers in those communities.**⁴⁹

Others were freshly hired for the MVs with an understanding that MoFA would absorb them onto the public payroll once the International Monetary Fund (IMF)-related ban on public sector recruitments had been lifted. Farmers in MVs noted that the AEs often stayed the whole day unlike before, when they merely made "*fleeting visits*". While the manifold support by MVP appears to have benefited MVs overall, MoFA's decision to concentrate its AEs in the MV areas also came at a cost to farmers in the non-MV areas. Indeed, farmers in the control communities were much more likely to complain about a lack of extension support than farmers in the MVs.

108. **MV households were ambivalent about improvements in their access to veterinary services.**

Prior to the MVP, formal vet services were delivered solely by MoFA. Veterinarians visits tended to be infrequent as districts rarely had more than one veterinary officer. MoFA offices also routinely complained of constraints in the form of transport and fuel. Thus, while veterinary consultations were theoretically provided at no charge to farmers (except for subsidised charges on certain treatments), visits to the communities simply did not take place. To resolve this problem, MVP introduced a bridging arrangement in the form of the community livestock worker (CLW) concept. This concept had some similarities with that of the CHW, which had been introduced earlier. In both cases, the provider's services would be limited to the level of primary healthcare and administered under the supervision of a relevant professional in the public sector. Cases beyond the capacity of the community-level worker would be referred upwards.⁵⁰ A key difference was that CLWs would not receive any allowances from MVP. Rather, they were expected to charge fees to recover their operational costs and even make small profits to sustain their enterprises.

109. **Owing to a complex interplay of factors, some cultural, CLWs had considerable difficulty sustaining their operations.**

For a start, they were operating in close-knit communities where many people are related through marriage bonds, and find the suggestion of being charged by a relation for advice alien, even objectionable.⁵¹ Indeed, in such cultures, even a kith-ship relationship is often sufficient to qualify for free advice. Additionally, farmers found the cost of unsubsidised treatment to be relatively expensive. A farmer needing to vaccinate his/her animals would easily be required to pay GHS 3–10 per animal, depending on whether that was a small ruminant (a sheep/goat) or a large one (a cow). This seemed exorbitant to the average subsistence farmer. CLWs had also wrongly assumed that the CLW package would be comparable to that for CHWs (especially with respect to the monthly allowances). Many quickly dropped out when they discovered that that was not the case. Another important finding is that farmers found it difficult to sell off an animal to save or protect the lives of others in the flock. This was a cultural hurdle which MVP had not anticipated in the design of the CLW intervention. Thus, across MVs,

⁴⁹ The lead farmer concept was introduced to MVs in 2014 as a response to the deficit in AEs.

⁵⁰ In the case of the CLW, these would include castrations and administering injections to sick animals.

⁵¹ Across the project area, the concept of an uncle or an auntie is entirely foreign. One simply has multiple fathers (one's biological father plus the male siblings of one's parents) and multiple mothers. The only qualification might be a *junior* or *senior* father/ mother, depending on the respective positions on the family ladder.

livestock owners complained of poor access to vet services, with some saying they had to travel long distances to seek veterinary assistance.

4.1.15 Effect on production and income

110. **MVs are ahead of their comparator CVs in respect of agricultural production.** This has been aided not only by the improvement in access to physical inputs but also by the adoption of the row planting method, which utilises land more intensively and makes investments in tractor services and weed control more cost-effective.
111. **MVs have generally made considerable progress in the cultivation of maize.** Several control communities also reported comparable or marginally lower improvements, based on support packages received from PAS, MoFA and other organisations. However, the benefits were less dispersed in CVs than they were in MVs. Participants in the MVs attributed the improvement mainly to a range of project interventions including promotion of fertiliser use, improved access to tractor services, and the creation of awareness about the crop's considerably shorter maturation period (three months as opposed to five for the millet that was traditionally grown). In an area known for its erratic rainfall pattern (and with the rains having failed several times during the five-year project period), farmers quickly came to equate maize's shorter gestation period with higher resilience to the adverse climate. Some farmers (e.g. at CF4) also pointed to the lower labour demands associated with maize cultivation, and they noted that the weedicides available to them tend to kill their millet plants. This leaves them with laborious hoeing as the only realistic weed control option on their millet fields. In addition, millet stalks are less sturdy in strong winds, which means that farmers have to invest additional energy and time in earthing up the plants.⁵²
112. **Cowpea production has similarly risen across the different comparator cohorts as well as across the sexes and well-being categories.** Though cultivated on a lesser scale than maize, cowpea is proving to be an increasingly important contributor to household incomes as well as to nutrition security. Acknowledging the superior return on cowpea cultivation, one poor man at MV1 observed: *"with one bag of [cowpeas], I can buy three to four bags of maize."* In MVs, soybean cultivation has risen following some promotional work and demonstrations by the MVP on diverse culinary uses of soybean.⁵³
113. **However, between MVs and CVs, the know-how underlying the increase in cowpea cultivation differs.** In the case of the MVs, farmers said they had transferred the skills they were taught regarding soybean cultivation to farming the higher-return cowpea crop.⁵⁴ By contrast, farmers in those CVs where cowpea has become a dominant crop often said they had picked up the requisite know-how on their cyclic migration stints to the fertile so-called *"overseas"* areas and along the White Volta, where they often hired themselves out as farm labourers on cowpea

⁵² Earthing up is the practice of heaping soil around the base of a plant – typically by hoeing – in order to stabilise it in the face of windy weather.

⁵³ MVP promotes the cultivation and utilisation of soya bean, but farmers and women are adapting the knowledge and skills acquired to the more common cowpea, which is their preferred legume.

⁵⁴ Double-cycle cultivation is also taking place around the MV settlements of Kpasemkpe and Kunkwa.

farms.⁵⁵ Observing that the return on cowpea farming was considerably higher than for the traditional crops they had been farming, several such migrants decided to divert their incomes and energies to that crop on returning to their home villages. Some of those living in riverside communities also acquired the practice of double-cycle cultivation from their time as migrants in water-rich settlements. The practice entails cultivating cowpeas along the fertile river banks/in the river beds when the waters have receded. This they do after harvesting the cereal crop from the main farming season. Where people are becoming more fully engaged with the double-cycle farming routine (e.g. CF1, MV3, MV6), migration is reportedly declining concurrently, as there is less idle time locally.

Box 2: Impact of cowpea cultivation in *Gbedembilisi* (MV6)

Over the last two years especially, the cultivation of cowpea (a popular bean variety) has increased significantly in *Gbedembilisi* (an MV community). Its impact on households involved in cultivating the crop is reported to be diverse and ranges from higher incomes to food security, improvements in school participation and a reduction in youth out-migration.

At the baseline and again at the mid-term visit, migration of young adults from *Gbedembilisi* was among the highest in the MVP communities sampled. A lack of jobs (but also the absence of electricity, difficulty in accessing potable water and the absence of post-primary schools within and near the community) was cited as influencing the high rate of migration out of *Gbedembilisi*. About two years ago, two wealthy farmers from the community acquired commercial tractors, marking a transition towards making farming less arduous than it had previously been.

Since the mid-term visit, the price of a 109 kg “maxi bag” of cowpea has risen from GHS 250 (second quarter of 2015) to GHS 450 (same period in 2017), a rise well above the cumulative rate of inflation in Ghana. Many of the community’s youth have been encouraged by this and are now staying back to farm cowpea on the banks of the Sisili river rather than endure the risks associated with migrating. Those interviewed further attributed the shift to cowpea to the fact that, in terms of both labour and fertiliser, cultivating cowpea requires less investment than cereal. For a start, cowpea attracts less weed because it sprawls across the soil, leaving weeds starved of sunlight. Women identified this attribute as an important influence in their decision to take up cowpea farming.

It also matures much faster than most other local crops, making it a safer investment in the face of an increasingly volatile climate. Further is its capacity to fix (rather than deplete) nitrogen in the soil, being a legume. Farmers now cultivate two cycles along the river bank – maize from April to July (during the rainy season) and cowpea from August to November (when the floods or rains are receding). The majority of the maize is retained for preparing *tuo zaafi* (TZ)⁵⁶ while the cowpea is mostly sold.

⁵⁵ Farmers in some MVs too (e.g. MV3) mentioned this route of skill acquisition.

⁵⁶ *Tuo zaafi* (popularly called TZ) is a dominant meal in the northern savannah. It is a cooked dough made from cereal flour and is eaten with vegetable soup, often without animal protein.

4.1.16 Food expenditures on funerals

114. Especially on the Bul'k (Builsa) side of the project area, funerals threaten to reverse much of the gain from improved agricultural productivity. The overwhelming majority of those interviewed felt that funeral expenditures are still rising and proving to be a drain on households' cereal stocks. Relatively large quantities of millet and maize continue to be expended not only in feeding the throngs of mourners who congregate from far and near, but also in brewing the alcoholic beverages served for refreshment. Livestock expenditures are equally high, with households yielding to longstanding cultural prescriptions which oblige them to make animal sacrifices to their ancestors.⁵⁷ At CF7, for example, livestock – particularly cattle – were perceived to “belong to the ancestors”. With such a belief system, it is rational for funerals to have priority in households' livestock holdings. Similar beliefs and practices persist even in MVs, despite the project having made deliberate efforts to educate citizens on the impoverishing impact of funerals and the need to deprioritise such expenditures. This appears to have had little impact on the abiding belief that “if these funerals are not performed, households will not progress, and their ancestors will [cease to] help them in their farming and other endeavours”. Funeral costs do not only impact the immediate household of a deceased person. Wherever their daughters are found in marital unions, households are also compelled to fulfil costly obligations, including travelling to distant communities to mourn for days – even weeks in some instances. That funerals continue to chew up a sizeable share of household food stocks is worrying, considering that many households remain food insecure during the long hungry season. Overall, more funerals are currently being observed in MVs than in the control communities as the former tend to be relatively more food secure.

Box 3: Funerals

Across Ghana's ethnic groups, funerals are quite distinct from burial ceremonies and it is the “celebration” (as it is routinely described in Ghana) of the former (the funeral, as an *add-on* to the burial) that brings closure to the process of bidding farewell to a departed soul. In that construct, and especially among low-literacy societies (such as those in the project area), families perceive their ancestors to be watching over them from the after world. For a family to receive the desired supernatural favour and protection their ancestors must first be treated with dignity and properly provided for; and the funeral is the unique occasion for fulfilling this obligation. Failure to so honour the deceased is perceived to elicit misfortune in a range of areas – including human and animal health, climate and soil fertility, and communal and natural resources. In many of the focus group interviews, the history of poor rains and other adverse effects of climate change were attributed to households' inability to perform the funerals of their loved ones. Overall, attempts by MVP, PAS and the churches to change this thinking have achieved little by way of reducing funeral costs. Especially in MVs (where incomes have risen), funeral costs have continued to rise as ever larger amounts of grain, livestock and money are expended in sacrifices and in feeding and refreshing mourners for days⁵⁸ – sometimes weeks – at a stretch.

⁵⁷ Fire festivals also entail slaughtering animals to placate the ancestral gods.

⁵⁸ At CF2, a six-day funeral was described as “normal”.

- 115. The fact that significant volumes of produce continue to be expended on funerals is explained by a mix of factors.** Traditionally, the funeral of a freshly deceased person cannot be observed while there is an outstanding funeral for another family member who passed earlier. With funerals routinely put on hold⁵⁹ (owing to food deficits experienced in most years), households/family members wishing to perform the funeral of a loved one are compelled to aggregate and finance all outstanding funerals in the family. Further, the mark of a successful funeral is the degree to which guests are catered for. Thus, a funeral adjudged to have inadequate food is commonly referred to as a “*cat’s funeral*” in the Builsa area.
- 116. The quest for modernisation has also had a toll on funeral spending.** It is becoming increasingly common to play modern music on (hired) hi-fi systems and to serve guests with bottled beverages rather than the traditional *pito* (a local beer brewed from millet and served lukewarm). A ban by the Bul’k paramountcy on serving (cheap) local gin at funerals (because many people end up intoxicated and losing control of their senses) has inadvertently contributed to the shift to (more expensive) bottled beverages. Increasingly, the actual food served also comes in takeaway packs, which is considered a mark of sophistication in the project area. A participant at MV4 noted: “*we are now integrating the Ashanti culture into ours*”.⁶⁰ Others expressed the opinion that the rich have set new standards which they feel “*obliged to meet, to avoid disgrace*”. A group of relatively wealthy women at CF2 observed that with the higher returns accruing from cultivating maize and beans, “*you have no excuse but to perform the funerals of your dead relatives*” – even if that threatens their ability to finance their children’s schooling at the higher levels. For poor women at CF1, it is a situation of having “*no option but to borrow*” to finance such expenditures.

4.1.17 Farmer cooperatives

- 117. With a few exceptions, it appears that the farmer groups formed in the MVs did not quite graduate into true cooperatives** – an observation confirmed by the MVP transition team.⁶¹ This situation appears to have been influenced by a long history of quick-access groups which communities in the savannah have become accustomed to forming; they are based on unreflective requirements which state actors have tended to apply in their credit schemes.⁶² In general, MVP’s farmer groups were not properly constituted as legal entities and formally registered with the Department of Cooperatives. Often too, contrary to good governance practice, group leaders failed to provide feedback to their constituents after engaging with project representatives. In MV2, for example, where organising units have historically been defined along ethnic and political lines, this undermined MVP’s intention to develop a community-wide cooperative that was non-partisan and non-ethnic.

⁵⁹ It is not unknown for funerals in the project area to be “*parked*” for 20 years.

⁶⁰ Across Ghana, Ashanti funerals are perceived to be the most ostentatious and most expressive.

⁶¹ Meeting held between representatives of independent evaluator’s PRA team and MVP transition team, 5 June 2017.

⁶² Government projects (including those by members of parliament) are often in a hurry to dispense credits. Because of this, they generally avoid investing in quality group dynamics. The resulting groups that are constituted often lack cohesion and do not outlast the life of the project.

- 118. Between the MVs, it appears that the recovery of the input credits distributed in the first year was more successful where it was done through farmer cooperatives.** In MVs where the project delivered the credits through systems other than the intended cooperatives (e.g. non-formalised, short-term farmer groups),⁶³ it appears that the quality of farmer education and information sharing was less effective. Yet – as can be inferred from the preceding paragraph – that was the unfortunate norm.
- 119. Some misunderstandings caused farmers to shun the cooperative concept.** It appears from the focus group discussions that, overall, the poor were more likely to either misinterpret or miss out entirely on the details of MVP's credit arrangement. The poorer focus groups in MV2, MV3 and MV4 said they simply had not appreciated that the fertilisers they were given were anything but a handout. Ultimately, this lack of clarity seriously undermined the effort to recover the credits. When they felt unduly pressured to pay back the cost of the inputs received, with some threats of police action, several poor farmers fled their communities until the perceived harassment had died down. The unfortunate experience led to some farmers in those communities subsequently shunning the effort to draw them into cooperatives. Some farmers too, particularly in MV2, simply disengaged from the project.

Infrastructure

- 120. Where roads that were previously impassable or not very motorable have been improved, there is evidence of some positive influences downstream.** MVP's road infrastructure improvements have come in diverse forms – including major rehabilitation, reshaping and spot improvements (e.g. construction of culverts along flood-prone stretches). Not only have the project's culverts been considerably less costly than the Government of Ghana average; residents of communities along the improved corridors are also reporting direct benefits. The most frequently mentioned changes include more vibrant produce markets. This is happening even in some control communities such as CN6, where more builders are now able to access the community to buy the stones scavenged by poor women. Across the area, several markets which were previously either small or periodic have now become larger and are operating daily. At MV1, which has benefited from a road widening and culverting intervention, the research team found evidence of its impact on trading activity. At the baseline, the community had no identifiable marketplace; by the mid-term visit, a weekly market was running; and at the endline, the team found an active daily market which peaks every sixth day. Participants also cited several other services (e.g. transport, and some of the larger and better equipped health facilities) that have become relatively easier to access.

⁶³ Farmers at MV6, for example, described how they come together to form temporary groups whenever they hear of an assistance package requiring beneficiaries to be organised in the form of an association.

Figure 6: Broken culvert on Nabari-Jadema road, financed under a government project



- 121. Linked to the growing vibrancy of markets have been some perverse outcomes of the road improvement effort.** For example, more children are skipping school on market days to sell food (typically girls) or hire themselves out as head porters or loaders of cargo trucks (boys).
- 122. Where grid electricity has been extended to communities (MV1, MV2, CN2, CF3, CN4, CF4, MV7), a range of petty businesses are springing up.** These include selling of ice water and chilled beverages (mainly women), retailing and installing electric appliances (young men), and operating commercial grind mills (rich men).
- 123. The study also found evidence of some lapses in the quality of some of the infrastructure delivered.** At the MV6 CHPS facility, for example, floors in the extension constructed by the project have already failed and are showing major signs of pitting while the floors of the older section remain intact. Visual inspections reveal that the stones used for the coarse aggregate component of the concrete mix were both too smooth and too large (sometimes, over two inches in diameter) (Figure 6).⁶⁴ The rendering of walls at the MV4 CHPS compound are already peeling off the blockwork. At MV2, a small-town water system installed by MVP in 2016 had already broken down four times since the project ended. However, substandard construction is not limited to infrastructures installed by MVP. Structures housing solar drying equipment at MV2, CN2 and CF2 funded by the Food Security and Environment Facility as recently as 2016 all had their roofs blown off soon after they were completed, and remained non-functional at the time of the endline visits (April 2017). The home latrines financed by the project also lack vent pipes to redirect odours away from the enclosure, and participants in some MVs reported that the pits were only waist deep.

Figure 7: Failed concrete floor, CHPS compound at MV6

⁶⁴ By contrast, culverts constructed under the project are still overwhelmingly intact while many of those built on an equally recent Government of Ghana-awarded contract on the Nabari-Jadema road are already failing (see Figure 5).



124. **The project does not appear to have made a strong dent in the poor culture of maintenance in the public sector.** In the education sector, much of the play and computing equipment supplied by the project had broken down by the mid-term visit. Challenges were also reported in respect of maintaining the ambulances and motorised tricycles.
125. **In several of the focus group discussions conducted in the MVs, participants were anxious that the home latrines built with project assistance might collapse during the rainy season.**⁶⁵ Much of the problem can be attributed to the haste with which the intervention was implemented. Participants were supplied with the floor slabs and roofing materials by MVP towards the end of 2016 and were responsible for constructing the actual structures themselves. Some participants said they were even threatened with blacklisting if they did not cooperate with the latrine initiative. Nevertheless, as discussed above, there has been some initial reduction in open defecation since the household latrines were installed in the MVs. By contrast, “*dig-and-bury*” sanitation remains a common approach to managing human excreta in most control villages, where only the richest have household latrines.

⁶⁵ Visual evidence suggests that many of the enclosures (superstructures) are built in un-stabilised earth and lack proper foundations.

5. Sustainability

127. By sheer coincidence, the closure of the MVP overlaps with the ending of several other interventions in the project area. These other projects/funding sources include PAS initiatives in the MV area, Camfed, GSOP and AngloGold Ashanti Malaria Control Limited (AGAMal)'s indoor residual spraying intervention. This further coincides with a yawning developmental funding gap precipitated by Ghana's recent transition into the league of lower-middle-income countries. Along with other findings discussed below, this makes sustainability one of MVP's biggest weaknesses.

5.1.1 Livelihoods

128. The observed improvement in access to tractor services shows some early signs of being sustained. The focus group discussions in the MV area revealed that several individuals from the cohort of wealthier men are investing in acquiring tractors for hire. However, in many MVs, households still feel compelled to supplement their incomes by engaging in the environmentally unsustainable activity of charcoal production – e.g. MV1 and MV7 (mainly as a coping strategy) but also in MV2, MV3 and MV5.

5.1.2 Self-help

129. A locally initiated social equity intervention at MV2 demonstrates the ingredients of a model could be encouraged. In that community, the rich offer their poor counterparts an acre's worth of free ploughing services. This has helped to lift many poor households out of poverty in that community. The practice has its roots in historical indigenous arrangements whereby wealth was redistributed within communities during difficult and festive periods. At MV2, community members still take it upon themselves to donate food to the destitute and the aged. However, increasing individuation and the impoverishing impact of climate change appear to have conspired with other factors to undermine the wider retention of such traditions. Unfortunately, MVP did not identify the potential in this practice as deserving of further reflection and possible promotion as an indigenous and sustainable poverty-reducing initiative.

5.1.3 Partner engagement

130. The subject of a project exit strategy only began to be discussed seriously with participating districts in 2015, the penultimate year of the five-year project. The MVP transition team perceives, with hindsight, that it would have been more effective if a larger proportion of the project period had been dedicated to rolling out and finessing the sustainability plan. As part of the exit strategy, participating districts were asked to co-finance certain expenditures, which the project had financed in full up to that point.

131. The quality of community engagement was another weak link in the MVP delivery strategy. While some discussions were indeed held with participating communities at various stages of the project, the process tended to be hasty and mechanical, lacking the reflexive-ness and patience that working with illiterate rural communities often requires. For example, the haste to execute the home latrine component resulted in the effort being too externally driven to inspire local ownership of the sanitation agenda. Yet, the development literature is replete with evidence that

when communities receive free goods and services without proper prior engagement, it does not encourage them to share in owning the vision. Such an initiative's impact also tends to be short-lived. The MVP transition team also acknowledged that inadequate investment was made in building requisite *"community capacity to advocate for support from the district assemblies."* In other words, now that the project has closed, it is unlikely that the beneficiary communities will be able to lobby successfully for the actions (e.g. monitoring and continuous education) needed to sustain the project's gains.

132. Effective community engagement would begin with dialoguing around villagers' shared vision of their future state, and building on that vision to define what actions community members themselves can take towards the improved state they dream of. When facilitated patiently and creatively, even the least endowed communities often begin to change certain development-undermining behaviours such as inappropriate child labour, open defecation, or handling food without washing their hands with soap. Other discussions would include clear roles for each party in the partnership. Such quality processes were largely missing from the MVP approach.

5.1.4 Teachers

133. **The replicability of the teacher allocation arrangement from which MVP benefited is debatable.** The improvement in learning outcomes in MV schools has been largely on the back of the superior pupil/trained teacher ratios (PTTR). To the extent that the trained teacher resource is a fixed one, however, the enhancement of PTTR in MV schools was possible only because potential resources were shifted away from non-MV schools. Quite clearly, such an arrangement is neither equitable nor sustainable. Similarly, the top-up allowances which MVP paid to senior personnel⁶⁶ of the district education directorates will not be sustained, now that the project has closed. Equally important is the observation that while learning outcomes have improved in MV schools, they remain largely unimpressive.
134. Many of the untrained CEWs recruited for the MV schools were supported to acquire the Untrained Teacher Diploma in Basic Education professional qualification over the life of the project and are increasingly being absorbed onto the public payroll. While this enhances the prospect of their retention, the fact that their pay no longer comes from the project gives GES greater control over decisions regarding their re-posting. It will be interesting to watch where they end up and how learning outcomes trend over the coming years.

5.1.5 Community health workers

135. **The sustainability of the CHW initiative had been a recurrent concern throughout the course of the MVP.** Prior to the MVP, rural healthcare delivery had benefited from the services of unpaid community-based surveillance volunteers. In 2012, MVP layered a data collection function onto the role of these health workers (in the MVs) and began compensating them with a formalised monthly allowance. This created some perceptions of unequal treatment in the ranks of health "volunteers" and raised concerns about how these allowances would be sustained, given the straitened finances of the health sector and the tottering Ghanaian economy. Following the

⁶⁶ Beneficiary staff included the District Directors, Assistant Directors responsible for supervision and Circuit Supervisors covering the project communities.

closure of the project, under one-quarter of the 55 CHWs who were working in the 35 MVs have been absorbed by the two-year YEA programme. Even so, reports suggest that the salaries of those absorbed were not being paid by the time of the evaluation visit.

- 136. In purely financial terms, the formalisation of the CHW position ought to be sustainable; however, it entails some governance challenges.** YEA compensations are funded through a so-called talk tax on cell phone usage; and, in 2016, Ghana's parliament approved a request to recruit 20,000 CHWs for two years, chargeable to that fund. From a governance viewpoint, however, the arrangement is something of an abuse of the YEA programme in that the initiative is explicitly intended as an internship/ skills development avenue for youth, not as a facility for providing regular employment to citizens at risk of losing their jobs.⁶⁷ Thus, CHWs who had already served with MVP for four or more years do not properly qualify for recruitment onto the YEA programme.
- 137. The intensity of CHWs' home visits and their effectiveness are perceived to have dropped already.** At several MVs, focus group participants observed that the CHW's visits had declined in frequency – from about twice a month to a single visit in one to two months. At MV7, volunteers admitted that they no longer collect anthropometric data for onward transmission to the district health directorates. With the withdrawal of the Android phones which CHWs were given by MVP, their effectiveness is perceived to have declined and they are no longer able to monitor pregnancies and remind expectant mothers of their due dates and antenatal appointments as effectively as before.

5.1.6 Community-based health planning and services

- 138. In the view of the Ghana Health Service, the MVP version of CHPS misinterprets the philosophy underpinning the concept and has no place in their hierarchy of facilities.** In a bid to extend service delivery to a larger population, the project consciously upgraded the specifications for the standard CHPS facility, ending up with a sort of hybrid model that allows the product to function as a sort of sub-district health centre, with services increasingly trending towards the curative. However, this version is incongruent with Ghana Health Service's concept of CHPS and results in a product that qualifies neither as a Level A (CHPS) nor Level B (health centre) facility in the Ghanaian health sector framework.⁶⁸
- 139. The superior levels of service purported by these "super CHPS" facilities cannot be sustained when the levels of provision do not align with the public budget.** The regular state budget does not make allowance for the higher recurrent expenditures associated with the enhanced standard of provision (wages for more nurses/higher-grade personnel, maintenance of more sophisticated equipment, higher utility bills, etc.) associated with MVP's variant of the CHPS concept. Ultimately, deficits in financing such incremental expenditures will undermine the objective of universal health coverage that the CHPS policy strives to deliver.
- 140.** That said, enhanced designs and specifications for state-financed CHPS compounds released in 2016 suggest that **the state itself is unwittingly departing from the original, more cost-effective**

⁶⁷ <https://www.yea.gov.gh/index.php/en/>

⁶⁸ See para 3 of the draft new CHPS Policy document.

CHPS concept. Indeed, fieldworkers found, during their visits to CHPS compounds (in both MVs and CVs) that there were routinely more staff at the respective facilities than there were patients. These observations raise legitimate questions of efficiency, particularly where state finances are as straitened as Ghana's currently are.

141. **Further, the fact that the current national health insurance policy discriminates against the CHPS level when reimbursing facilities for their operational costs makes it difficult for CHPS facilities to buy basic medicines.** As previously indicated, outreach services are not covered by the reimbursement policy. An inadvertent effect is that it lures CHPS facilities to prioritise in-house curative care services at the expense of their core preventive mandate. This triggers a catch-22 situation in which the mis-prioritisation of curative care fuels the disease burden which, in turn, raises the cost of healthcare and undermines the availability of medicines. Consistently, patients and users interviewed cited the lack of medicines as a major disincentive to their continued patronage of CHPS facilities for *curative* purposes. Under the circumstances, many said it made more sense for them to take their sicknesses to the health facilities in the larger towns, since they would have to travel to those destinations anyway to purchase their medicines.
142. **The stocks of antimalarial and other basic medicines which MVP supplied to CHPS facilities in the MVs have now run out.** As the stocks have been depleted, the opportunity to access medicines for free no longer exists and CHPS clients in many MVs (e.g. MV1, MV2, MV4, MV5) are very unhappy about having to pay for their medicines. However, the CHPS at MV6 still appears to have an appreciable level of medicines in stock.

5.1.7 Transport

143. **There have been some reports of ambulance services suffering since the closure of the project, despite evidence of some planning towards sustaining these services.** In the early part of 2016, MVP collaborated with the District Health Administrations of Builsa South and West Mamprusi to develop vehicle management policies. Devised to guide the management of formal public ambulance services in the participating districts, the policies include fee schedules designed to cover fuelling expenses. The Builsa South policy excludes the costs of routine maintenance while that for West Mamprusi includes some amount for such costs. In Mamprugu Moadori – a MVP district without such a policy – an ambulance provided to the district through the Member of Parliament's share of the District Assemblies Common Fund has been grounded following the health directorate's inability to settle a repair bill in the region of GHS 2,000.⁶⁹ Fuelling for the motorbikes used by health workers has also been adversely affected since project closure, owing to deficits in the financial capacity of the relevant state institutions.

5.1.8 Water

144. **There have been issues with some of the water systems as well.** By May 2017, a small-town water system installed at MV2 in 2016 was non-functional, with no clarity on how the repairs would be financed. In other MVs, boreholes sunk by the project were either not very productive (leading to long queues) or had to be capped because of high fluoride levels. At MV6, for example,

⁶⁹ Equivalent to some GPD 350 or USD 430.

participants complained that they were not consulted in the siting of the boreholes and that they would have guided the implementers to a location on the outskirts of the community, where yields have been observed to be very good.

5.1.9 Funerals

145. As previously explained, **costly and unyielding funeral traditions constitute a threat to the project's well-being gains**. Repeatedly, interviewees acknowledged the wealth-depleting impact of funerals and also observed how the lengthy periods of revelry and drunkenness are invariably shadowed by incidents of teen pregnancy. A further problem associated with funerals is that children often stay up late throughout the observance period, with adverse implications for their effective participation in class.

6. Closing remarks

147. For the most part, MVP did deliver on basic improvements, with well-being improving overall.

In all seven MVs sampled for this study, participants perceived well-being to have generally improved, particularly with a discernible shortening in the length of the hungry season. This contrasts to some (four) of the control villages covered by this study, where there were reported declines in perceived well-being. It is important to note, however, that a multiplicity of other interventions in the wider area (many of which predated MVP), means that the differences in outcomes reported for MVs and CVs are not always large.

148. The drivers behind these changes in well-being are varied, although several factors stand out from the analysis of this study:

- Firstly, agricultural practices and particularly improved know-how on planting in rows and correct spacing of plants are said to have greatly impacted on well-being in poor households. Indeed, farmers in some control communities are also copying from such practices (especially row planting, proper plant spacing, and the application of fertiliser and weedicide) observed from nearby MVs – although the diffusion of knowledge is complex, and other initiatives by other projects and farmers have also contributed.
- Secondly, farm sizes (area under cultivation) have also increased in both MVs and CVs (although less markedly in the latter), and this has been for women as well as for men, and even among some poor households. This expansion owes much to the MVP's support to tractor hire amongst farmers – although the appetite for tractor services is something that has increased across both MVs and CVs areas over several years (facilitated by a diverse range of actors including PAS, Technoserve, MoFA, MiDA, ACDEP and ADVANCE).
- Thirdly, the introduction of maize by MVP, MoFA and PAS (and more latterly cowpeas, through copying from other settlements) has been a singularly significant factor in addressing food security challenges for MV households, although again, this is also occurring in CV areas. Maize is increasingly replacing millet (the previously dominant, traditional staple) in many MVs.
- Fourthly, the VSLAs promoted by the project have been instrumental in mobilising women's savings and raising their confidence to engage and negotiate in the marketplace. Outside the MVs too, VSLA is gaining in popularity, though it tends to be implemented less rigorously and effectively.

149. Alongside these factors, improvements in road infrastructure (typically the installation of culverts) were reported to be having a positive effect on enterprise development and, even more so, on the vibrancy of produce markets, ultimately impacting livelihoods and well-being. Plus, beneficiaries of the state-run LEAP initiative have been able to start up small enterprises in livestock rearing and petty trading in both MVs and CVs.

150. Local people nonetheless cite many persistent barriers to improving well-being. Most people refer to the increasingly unpredictable weather patterns, as well as flash floods causing adversity in several communities. Farmers also report a rise in livestock mortality rates (both MV and CV areas), most notably in 2016. Plus, for particular households, chronic ill health and the death of a household member was an additional factor that plunged some households into poverty.

Alongside this, the out-migration of youthful labour can undermine progress (although this seems to be declining in a number of households – especially in MVs). Plus, alcoholism is seen as a further barrier to progress.

151. In terms of other observed changes, then the key ones identified by this study are:

- **In terms of child poverty, net well-being was perceived to have improved for children.** In general, they are said to be eating more meals, especially in the MVs, and their diets are somewhat richer in protein (typically from legumes). Children in several MVs are also spending more time in school, and formal healthcare (in both MVs and CVs) has also become more accessible. Several communities (both MV and CV) also reported declines in child mortality, with the presence of a functional CHPS compound (with resident nurses) seen as a major contributor to this decline.
- **In terms of education, then parents in MVs are sending their children off to school earlier (both in terms of age and time of day)** than at the baseline, encouraged by the relative improvement in teacher presence. Some however see the superior number of teaching staff in MV schools to be at a cost to CV schools (as the education authorities tended to give preferential treatment to MVs when allocating teachers). In several MVs, participants also reported that PTA meetings had become more regular and more focused on school attendance.
- **In terms of healthcare, there appears to be growing confidence in the diagnostic ability of the formal healthcare system** – although several important health sector pilots and interventions have contributed to the continuous improvements observed not only in MVs but across the wider evaluation area. Across the board, there were reports of a decline in the numbers relying on indigenous healthcare options – e.g. TBAs, herbalists, diviners, prayer camps and drug peddlers. Participants commonly decried the lack and relatively high cost of accessing orthodox medicines. Alongside the formal health system, *knowledge* about pregnancy, exclusive breastfeeding during the first six months, child nutrition, family planning and the childhood killer diseases is said to have improved, especially where the state is delivering CHPS services. This knowledge has however not always translated into practice (for example, grandmothers sometimes disregard the advice on exclusive breastfeeding, or bed nets are used for purposes other than to keep out mosquitoes).
- **In terms of infrastructure, several previously impassable roads have been improved,** resulting in positive improvements – although also negative effects (e.g. children in several CVs skipping school to provide portage services at the increasingly vibrant markets and transport terminals). Where grid electricity has been extended to communities, a range of petty businesses are springing up. But, there is evidence of lapses in the quality of some of the infrastructure delivered, and particularly households in MVs were anxious that the home latrines might collapse during the rainy season.

152. **In conclusion – and despite these observable improvements in perceived well-being – it seems that many of these changes may not be sustainable beyond the life of the project.** Just months after the MVP's closure, some of the project's initial gains have already begun to slip. There are several important elements to this: Firstly, the attention to maintenance has not been particularly strong, with the project arguably giving greater emphasis to installing facilities and providing logistics than to ensuring that these deliver a continuous stream of services over the life cycle. Secondly, the quality of community engagement appears to have been relatively weak. While

discussions were indeed held with participating communities at various stages of the project, the process tended to be hasty and mechanical, lacking the patience that working with illiterate rural communities often requires. Thirdly, the replicability of the teacher allocation arrangements from which MVP benefited is contentious, with potential resources being shifted from non-MV schools. Fourthly, the sustainability of the CHW initiative beyond the project's additional salary top-ups is a recurrent concern. Both the frequency of their home visits and their effectiveness are already perceived to have dropped following the project's closure. Alongside the CHWs, the superior levels of service purported by the so-called (project financed) "super CHPS" cannot be sustained within the public budget. And finally, some of the gains are also threatened by a suboptimal integration of the project into pre-existing community arrangements and the systems of Government institutions. Taken together, these are significant challenges to ensuring that any gains made by the project will be sustained in the longer term.

Annex 1: Changes in child poverty

1.1 Traditional practices affecting children

153. In all MVs and in many CVs as well, net well-being was perceived to have improved for children.

Several small but important changes were noted in cultural practices and attitudes towards children in both MVs and CVs. These were attributed to a range of factors – including ongoing education by Community-Based Health Planning and Service (CHPS) staff, changes in crops farmed and nominal increases in wealth in certain communities.

1.1.1 Diet

154. Several of the focus group participants interviewed said that children's diets are now somewhat richer in protein.

While hardly any changes were reported in the very low levels of animal protein consumed, children in MVs (but excluding MV7) are increasingly being fed eggs, following repeated education at the child welfare and post-natal clinics as well as in the outreach programmes conducted by CHWs and other staff of CHPS compounds in the MVs. Similar changes were also noted among the non-poor in some CVs (e.g. CF3), explained by a combination of health education and rising prosperity. Though eggs are not expressly forbidden for children traditionally, animal proteins are nevertheless widely considered as delicacies reserved for adults. A higher consumption of beans was reported in many communities, influenced in part by the increasing cultivation of cowpea in both CVs and MVs.

155. Children are eating more meals overall, especially in the MVs, but also in several CVs. Parents repeatedly observed that their children now prefer maize TZ to the traditional millet-based recipe. This is happening in all categories of communities, though the scale of change and the diversity of diets are both greater in MVs. However, even in MVs, children's diets tend to be limited to TZ in the hungry season, and lacking variety. Further, just as at the baseline, diets are still considerably more varied in the homes of the rich than they are in those of the poor.

1.1.2 Education

156. Children in some communities are gradually spending more time in school as a result of various factors.

The influences cited by participants include the community sensitisation campaigns waged by the Ghana Education Service (GES) and, in the case of the MVs, the community education workers (CEWs); the improvement in tractor access; and the enhanced level of food security largely attributed to the increasing switch from millet to maize cultivation. In communities where food security has experienced a boost, there is less urgency for children to go foraging for wild fruits during school hours. While children still work in the family fields and community pastures, more of this now takes place after school.

1.1.3 Other practices

157. However, as noted in the discussion of coping strategies in Sections 3.1.10 and 3.1.11, some cultural practices that undermine child well-being persist, even in some MVs. These include the practice of *doglienta* (whereby poor households send off their young daughters to serve as house-helpers with their better-endowed urban kin) and demands by the ancestral gods for specific

children to assist the fetish priests with various shrine tasks, undermining children's education. That said, *doglienta* continues to be more common in the CVs. The decline in the practice was attributed mainly to the improvement in food security.⁷⁰ In communities where the practice persists (e.g. CF4, MV5 and MV6), parents are beginning to insist on the guardian households enrolling and keeping the fostered girls in school.

158. **Excessive spending on funerals was another practice specifically identified in virtually all communities (with MV1, CN1 and MV2 as notable exceptions) as a tenacious cultural practice that disproportionately threatens the well-being of children.** Not only did many concede the impoverishing impact of funerals; funerals were also frequently described as promoting “*sexual immorality*”, “*luring young girls into sex*” and “*leaving them pregnant*”. At CF1, a citizen noted how “*sometimes, we spend so much on funerals that we are unable to pay our children school fees.*”

1.2 Differences between children from rich and poor households

159. **Overall, disparities between children from rich and poor households in the MVs are perceived to have narrowed since the baseline.** At MV6, the focus group of poor men said the differences are no longer discernible and that “*it is [now] difficult to tell which children are from rich families and which from poor families by appearance.*” Similarly, at MV5, it is no longer easy to distinguish children by their household well-being ranking, but for the bicycles which children from wealthier homes ride to school. While these differences have shrunk in some CVs, it has been less steep.

1.3 Drivers of change in child poverty situation

160. **The presence of a functional CHPS compound, with resident nurses, was seen as a major contributor to the decline in child mortality.** The fact that these facilities are typically NHIA⁷¹-accredited also makes them more accessible to poor households with active NHIS subscriptions. Interestingly, the project period overlapped with a surge in state investment in CHPS compounds nationwide under an initiative of the last President.⁷² Thus, several CVs got CHPS facilities over the period; at the same time, CHPS compounds which the relevant district administrations had promised to build had not been completed in some MVs when the endline fieldwork ended (April 2017). Another reason given for the reduction in child mortality was that the frequent outreach/CHW visits made it possible for illnesses to be spotted early before they escalated beyond control.⁷³
161. **The Health Directorate of Builsa South District benefited from a fleet of motorbikes, resulting in notable improvements in home visits district-wide, including to non-MV communities.** Another important influence acknowledged by participants was the increase in the

⁷⁰ The virtual eradication of *doglienta* at CF4 was credited to the singular effort of the chief, who happens to be an educator and the Guidance and Counselling Officer in his district.

⁷¹ National Health Insurance Authority.

⁷² During the tenure of the Mahama administration, members of the executive gave up 10% of their salaries to finance the construction of additional CHPS compounds (<http://www.myjoyonline.com/news/2013/November-19th/govt-announces-10-pay-cut-for-president-mahamaveep-and-ministers.php>).

⁷³ CHW visits reportedly covered virtually all households by the time the project closed at the end of 2016.

administration of immunisations during home visits. Here also, MVP had supported the health directorates in the project area to intensify immunisation exercises across their entire jurisdictions, and not just in their MV communities.

Annex 2: Changes in women's economic roles

Women's livelihood activities

163. **In some communities, women have diversified the crops they cultivate. The new crops include maize, cowpea and, to a lesser extent, soybean (in MVs).** In some communities endowed with valleys (e.g. CN3, MV5), some of the women have begun cultivating higher-yielding varieties of rice such as *warr warr* and *sika munu*, promoted by MoFA. Women are also farming more rice in the flood-prone valleys at CF3 and CF4, mainly because rice is more resistant to floods than cereals and most other crops. In most households (especially those in the poorer segment), the majority of maize, rice and soybean harvests are retained for household use while the cowpea is mostly sold, with a portion kept for household consumption – especially for making toddlers' and other children's rations.
164. While women in both project and control communities are still required to assist in the household fields (often referred to as the "*men's farms*"), an increasing proportion of MV women report having their own farms – even if the harvests go mainly to the household kitchen. Regarding the noticeable rise in women's active involvement in farming, a key informant opined at MV4: "*if MVP had not sensitised the women on the need to cultivate their own farms ..., they would have given the inputs to their husbands.*"
165. Other women (e.g. at MV6) gather stones from the rocky terrain for sale to builders. At CN7, women have scaled back on the production of rice and groundnuts, diverting their attention to the higher-return activity of stone quarrying. However, at CN3, poor women lamented the decline in their relatively significant livelihood of scavenging for stones for use in the local concrete industry. The drop has come about because the road to the community has become impassable, following the washing away of the approaches to the bridge. This has caused supply to dwindle from truckloads (as at the baseline) to mere donkey cart-loads at the beginning of 2017.

Women's farm sizes

166. **The increasing availability of tractor services in the MVs is enabling wealthier women to farm larger areas.** Even among poorer women, many in the MVs have expanded the areas they farm to accommodate the new crops (typically maize and soybean)⁷⁴ introduced by the project. Loans from the respective VSLAs have also supported women in some MVs to invest in enlarging their agricultural efforts. Everywhere, however, poor women's farms remain smaller than men's as they still have to help out on their men's farms.
167. At MV6, both poor and rich women said they were now able engage more actively in farming, following a significant improvement in the teacher situation, particularly in the kindergarten department. This has enabled them to keep their young children in school, freeing up some time they would previously have committed to child minding. In several other MVs, women observed that teachers attend more consistently and more punctually too, following the provision of teachers' housing by MVP. The resulting sense of security has encouraged women to see their

⁷⁴ Not uncommonly, the skills acquired in soybean cultivation from MVP have been transferred to growing cowpea, for which there is considerably greater demand on the market.

children off to school earlier, relieving them to get onto their farms while the weather is still conducive to farm work.

168. In many CVs too, women are now farming larger tracts, even if (as with their peers in the MVs), they generally don't actually *own* those lands but merely have access based on the consent of their husbands or the other men of the household. At CF3, richer women are investing loans from *susu* into extending their farms. Poor women in that community are also working bigger lots, driven in part by competition among rival wives to please their husbands. At CN6, men are releasing more of the forest lands to their women, because they are put off by the long walk; whereas, at CN3, it is the richer men who are relocating to the less encumbered forest to farm maize and cowpea on a larger scale, ceding the homestead farms to their women.