

Quarterly Report July – September 2015

Madara

“MILK” in Hausa

Funded by USAID / Office of Foreign Disaster Assistance (OFDA)

PROJECT SUMMARY

Award No:
AID-OFDA-G-14-00084
Start Date: May 1, 2014
End Date: February 28, 2016
Report Date: October 30, 2015
Total Award: USD \$1,529,825

1. Executive Summary

The MADARA program, or “milk” in Hausa, is building on the achievements of the OFDA-funded PASTORAL I/II programs (March 2011-September 2013) and *Wadata Makiyaya* (June 2013-June 2014) with the aim to enhance food security and strengthen the livelihoods of vulnerable households in the Filingué Department, Tillabéri region of Niger. The program is meeting the early recovery needs and rebuilding the livelihoods of 21,000 beneficiaries (3,000 households) over the course of 22 months.

Overall in the last quarter, significant progress towards health and nutrition program objectives in particular was achieved through women’s discussion groups, cooking demonstrations and home visits, which supported a significant increase in women practicing breastfeeding (from 19% at baseline to 58%).

Notable achievements this reporting period (July – September 2015):

- ✓ 24,242 forestry plant seedlings produced in three project-supported nurseries and used to replant 77.44 hectares of grazing land. An additional 21.9 hectares were reseeded, ensuring regeneration of natural forage on pastureland rehabilitated in 2014 through MADARA;
- ✓ Supervision and monitoring of 14 local land tenure commissions (COFOBs) which showed positive results of COFOBs fulfilling their roles;
- ✓ Training of 149 women from individual and cooperative enterprises on cheesemaking techniques, following an organized process to produce a more standard product for improved marketing;

- ✓ 15 auxiliary para-veterinarians and five animal feed businesses received technical supervision and support to improve their livestock health services and outreach techniques ;
- ✓ 370 women across nine villages reached in cooking demonstrations that resulted in all knowing how to make enriched porridge ('bouillie');
- ✓ Trained 28 Local Health & Nutrition Coordinators (CLSN) on the next set of essential family practices, including: use of health centers for pregnant and lactating women, complementary diet for pregnant and lactating women, and improved hygiene and sanitation practices. The reached 581 beneficiaries (79 men and 502 women) in 16 villages;
- ✓ Identification and establishment of 27 Discussion Clubs across nine villages comprised of 381 women, for discussing health and nutrition messages broadcast on the radio. At least 24 discrete radio programs supported by MADARA were broadcast in Haoussa and Djerma languages about essential practices, including exclusive breastfeeding and complementary feeding of young children;
- ✓ CLSN and MADARA staff conducted 144 home visits with women practicing exclusive breastfeeding for follow up after trainings and to provide additional support around optimal techniques;
- ✓ Technical support and monitoring of 146 microenterprises financed through MADARA to help them apply business management practices.

2. Program Overview

Large parts of the Nigerien population have been affected by severe food insecurity in the last decade, particularly during 2005, 2008, 2010 and 2012, after a combination of drought, irregular rainfall and flooding decimated crops and forage. The pattern repeated itself in 2013 with the early arrival of the rains, followed by a prolonged period of drought that negatively affected both the production of cereals and the regeneration of natural fodder. The Filingué department, where livelihoods are centered on agro-pastoral activities, was one of the departments most affected by the recent drought. An estimated 23.4% of the population in this department was classified as moderately food insecure in November 2013, and the risk for food insecurity increased during the lean season of 2014¹.

The MADARA program is designed to help food insecure households meet their immediate needs and rebuild their livelihoods, while simultaneously strengthening the dairy sector value chain to improve availability and access to nutritious milk products. The MADARA program aims to work with communities to respond to the need for: 1) Opportunities to rebuild savings and livelihoods following successive crises; 2) Sustainable rehabilitation of pastureland to improve access to fodder; 3) Improved access to nutritious animal feed during the dry and lean season; 4) Strengthened animal health and nutrition and improved quality and quantity of milk production; 5) Increased availability and accessibility of local dairy products, and prioritization of dairy products for household consumption, in order to contribute to improved nutrition and dietary diversity; and 6) Improved hygiene in dairy production, and more sanitary conditions in local markets.

3. Performance Summary

Award-Level Beneficiaries:

Cumulative Period Targeted		Reporting Period Reached		Cumulative Period Reached	
Total	IDP	Total	IDP	Total	IDP
21,000 (3,000*)	0	5,404 (772*)	0	24,038 (3,434*)	0

¹GoN "Enquête National", p. 3.

* Total beneficiaries is based on an average of seven members per household; in parentheses is the # of households

SECTOR 1: Agriculture and Food Security

Program activities primarily focused on replanting grazing lands and consolidating learned techniques through technical support visits. In addition, discussions were held with the seven women's dairy processing cooperatives about the possibility of the program playing a role in supporting mini dairy collection and processing centers.

SECTOR #1 Agriculture and Food Security	<i>Objective: Protect and enhance productive performance of existing animal assets to improve animal nutrition and strengthen dairy production</i>				
Geographic Area (s)	Filingué department, Tillabéri region, Niger				
Beneficiaries Targeted	7,000 individuals (1,000 households)				
Beneficiaries Reached (Reporting Period)	8,134 individuals (1,162 households)				
Beneficiaries Reached (Cumulative)	8,134 individuals (1,162 households)				
Subsector: Livestock					
INDICATORS	Disaggregated	Applicable	Cumulative Value Targeted	Reporting Period Reached	Cumulative Reached
Number of animals benefiting from or affected by livestock activities	N/A	Yes	28,000	26,760	26,998
Number of people benefiting from livestock activities, disaggregated by sex	Male	Yes	3,500	5,005	5,005
	Female	Yes	3,500	3,129	3,129

To support the full regeneration of natural forage on pasturelands that were rehabilitated during cash for work activities in 2014, MADARA – with support from local partner ASUSU – supported the establishment of three community nurseries which would supply plants for replanting. These nurseries completed the production of over 24,242 plants of local varieties, including *Acacia Senegal*, *Ziziphus Mauritania*, *Balanites* and *Bauhinia*, which are all varieties that livestock enjoy eating. Grazing lands accessed from four villages (Toukounous station, Toukounous Arzika, Tarkassa and Banguir Barébari) were replanted and reseeded through cash for planting activities carried out by the same beneficiaries who participated in cash for work in 2014. A total of 99.34 hectares were revitalized, including 77.44 hectares replanted with plants produced from the nurseries, and 21.9 hectares reseeded with seeds collected by the communities. The Department of Environment in Filingué supervised the replanting.

Table 1: Tree planting summary of pasturelands

Pasture site	Participation			Plants planted	Hectares planted
	M	W	total		
Toukounous Station	161	170	331	8650	27.63
Toukounouss Arzika	200	20	220	9000	28.75
Tarkassa	202	18	220	5940	18.97

Banguir Barébari	50	27	77	650	2.07
TOTAL	613	235	848	24240	77.44

Once replanted, the program supported the local land tenure commissions (COFOBs) to lead a number of meetings to determine the structure of community management of the revitalized grazing lands. These meetings were carried out in discussion with the community surveillance committees, which were put in place in 2014 to watch over the regeneration, as well as with representatives of herders and farmers. Through these discussions, community members reached agreement about how to best manage the pastureland so that it achieves full regeneration. Among the actions they elected to adopt are putting in place a local brigade composed of two representatives from the surveillance committees, who will make regular monitoring visits to dissuade people from entering with their herds or cutting the forage; and agreeing that each actor would take responsibility for informing agropastoralists and nomadic herders to avoid passing through the protected areas.

As relates to the conflict management role of local land tenure commissions, 14 commissions were supervised by MADARA staff to monitor their functionality. MADARA found strong evidence of effective monitoring, carried out according to national land regulations. The 14 commissions carried out 98 land sales acts, 29 customary property right acts, five land donation acts, three land loan acts, and two land rental acts. COFOBs in several villages which did not deliver land acts were subsequently visited for technical support and follow up.

Table 2: Land acts delivered by 14 COFOBs, monitored

Village	Number of sales	Number of customary possessions	No. of land pledges	No. of land donations	Conciliation	Loans	Rentals
Louma	70	13	0	2	0	3	2
Kania Zeno	2	0	0	0	0	0	0
Takoussa	8	0	0	0	0	0	0
Toukounous Station	6	12	0	1	1	0	0
Solowa	0	0	0	0	0	0	0
Garin Kimba	0	0	0	1	0	0	0
Makani Souleymane	0	1	0	0	0	0	0
Tanfadara	5	0	0	0	0	0	0
Tamagorjeck	4	0	0	1	0	0	0
Banguir Kourféyawa	1	0	1	0	0	0	0
Banguir Barébari	0	0	0	0	0	0	0
Banguir Bouzayé	0	0	0	0	0	0	0
Talcho	2	0	0	0	0	0	0
Kania Zeno	0	3	0	0	0	0	0
TOTAL	98	29	1	5	1	3	2

The Livestock Value Chain Coordinators' (LVCC), progress this quarter – which coincided with the start of the rainy season—was marked by agro-pastoralist and pastoralists in the program's 24 villages cutting and

stocking fodder to put aside as feed for animals, a technique encouraged by MADARA. At least 153 pastoralists and agro-pastoralists monitored by the program (132 men, 21 women) have stocked considerable amounts of fodder. An internal evaluation showed that roughly 64% of beneficiaries trained in improved livestock management techniques are applying at least two (see M&E section). The primary difficulty noted by many of the livestock owners is having an acceptable place to store such large amounts of fodder, considering the rains which can damage cut fodder. MADARA staff are working with communities to identify local solutions to this challenge, including using already established grain banks which are not yet needed for cereals (available until the harvests begin in November).

During the quarter, MADARA also developed radio messaging to reinforce both important livestock techniques taught by the program – such as best practices for dairy production—as well as information about appropriate conflict management practices between agriculturalists and livestock herders. Messages were broadcast on the local radio of Filingué and added to the radio’s bank of programming to be rebroadcast in the future.

Continuing its focus on animal health practices, MADARA organized a technical supervision visit of 15 auxiliary para-veterinarians with the involvement of the Department of Livestock in Filingué. This visit raised a number of issues around the functionality of the auxiliary paraveterinarians (APV), including low product stocks despite the financial grant they received through the micro grants; lack of transportation means to conduct visits in villages farther away; lack of sufficient ongoing technical coaching of the APV by the regional Private Veterinary Service Provider; and the interference of some village chiefs in the APV’s management of their activities.

In order to encourage local stakeholders find solutions to these issues, Mercy Corps organized a meeting among the Private Veterinary Service Provider, the Department of Livestock, the mayor of Filingué, the 15 APV and ASUSU S.A. During this meeting, the results of the technical supervision visit were shared with all actors. Through discussions, the group proposed a number of recommendations for community-level authorities, the Private Veterinary Service Provider, the APVs, the Department of Livestock, ASUSU S.A. and Mercy Corps. The recommendations ultimately centered on ensuring the actors fulfilled their roles in animal health service provision. Specific recommendations determined through the discussions included:

- Community authorities, including the Mayor and village chiefs, should support animal health efforts, including vaccination support, through awareness raising via the radio which should make clear the difference between vaccination campaigns and paid services
- The Private Veterinary Service provider should comply with his role to conduct regular technical support to the APV, or appoint someone from his business to do so
- Mercy Corps should ensure regular updates with the Private Veterinary service to assess the progress of the program
- The Livestock Department should make sure that quality control measures are enforced to support animal health and that stakeholders are fulfilling their responsibilities
- APVs are encouraged to approach ASUSU S.A. to discuss a plan for loans for means of transportation

The issue of low product stocks was noted and will be explored in more detail directly with the APVs through the next round of entrepreneurial trainings and performance assessment.

SECTOR 2: Economic Recovery and Market Systems

The primary focus of activities under this subsector centered on ensuring the microenterprises received adequate coaching and support visits after receiving their first tranche of grant funding. Over the last three months, program activities necessarily worked around the schedules of beneficiaries, given the start of the farming season when most beneficiaries are cultivating fields. This affected the program’s ability to efficiently

reach microentrepreneurs with technical support and coaching visits, prolonging the scheduled phase for coaching.

SECTOR #2 Economic Recovery and Market Systems	<i>Objective: Restore livelihoods of vulnerable households and improve access to affordable dairy products for communities in the Filingué department through strengthening of the dairy value chain</i>				
Geographic Area (s)	Filingué department, Tillabéri region, Niger				
Beneficiaries Targeted	21,000 individuals (3,000 households)				
Beneficiaries Reached (Reporting Period)	2,199				
Beneficiaries Reached (Cumulative)	14,126 individuals (2018 households)				
Subsector 2.1 Livelihoods Restoration					
INDICATORS	Disaggregated	Applicable	Cumulative Value Targeted	Reporting Period Reached	Cumulative Reached
Number of people assisted through livelihoods restoration activities, disaggregated by sex	Male	No	1,575*	836	836
	Female	Yes	1,575*	410	410
Percentage of beneficiaries reporting their livelihoods restored within three to six months after receiving support	N/A	Yes	90%	74%	74%
Total USD amount channeled into the program area through sub-sector activities	N/A	Yes	\$7,500	\$0	\$8,335
Subsector 2.2 New Livelihoods Development					
INDICATORS	Disaggregated	Applicable	Cumulative Value Targeted	Reporting Period Reached	Cumulative Reached
Number of people assisted through new livelihoods development activities, disaggregated by sex	Male	Yes	1,400**	184	184***
	Female	Yes	1,400**	167	167***
Number of new MSEs started	N/A	Yes	400	0	154
Percentage of people, by sex, continuing in their new livelihoods by program completion	Male	Yes	90%	0	0
	Female	Yes	90%	0	0
Total USD amount channeled into the program area through sub-sector activities	N/A	Yes	\$124,000	\$71,000	\$71,000
Subsector 2.3 Temporary Employment					
INDICATORS	Disaggregated	Applicable	Cumulative Value Targeted	Reporting Period Reached	Cumulative Reached
Number of people employed through Cash-for-Work activities, disaggregated by sex	Male	Yes	1,050	1237	1237
	Female	Yes	450	444	554

Average total USD amount per person earned through CFW activities	N/A	Yes	\$134	\$5	\$ 75****
Total USD amount channeled into the program area through sub-sector activities.	N/A	Yes	\$201,000	\$7,530	\$112,843

*450 women are targeted for this activity. With an average household size of seven, we estimate approximately 1,575 males and 1,575 females will benefit.

**120 men and 280 women will directly participate in new livelihoods development, to benefit their households of approximately 1,400 males and 1,400 females total.

*** This is low due to the fact that most of the entrepreneurs benefitting from grants and beneficiaries benefiting from livestock-focused production and health activities are engaging in livelihoods that are not new. The target is being reassessed.

****As discussed in the Annual Report for MADARA, the Cash for Work activity was adjusted from to meet the changing needs on the ground. MADARA is rechanneling funds into strengthening dairy value chain activities.

Subsector 2.1: Livelihoods Restoration

In order to continue to consolidate and support the cheesemaking dairy subsector and the seven women's dairy processing cooperatives, MADARA organized a training of 149 women on technical cheese production themes:

- Standard cheese production: how to transform milk into tchoukou using the standard cheese-making kit (a production kit which the cooperatives commissioned thanks to their grant funding);
- Appropriate utilization of cheese production tools and maintenance of tools;
- How to organize production by task amongst the group;
- Hygienic practices and quality control during cheese-making; and
- Standard packaging processes and marketing.

The training was carried out by two experienced women from the Apfen Welli Women's Cooperative of Toukounous Station, with support from the Department of Livestock who provided additional technical training on hygiene regulations.

Following the training, the women decided upon a number of actions for their cooperatives, including the adoption of standard kit as the preferred tool for fabrication; putting in place rotational groups to maintain an organized task breakdown and better organize production of cheese once a cheesemaking facility is identified; and continuing the practice of ongoing communication among the cooperatives to determine proper packaging and marketing.

To increase their economic activity and ensure hygiene standards are met, the women's cooperatives requested that MADARA consider supporting them with the establishment of mini dairy processing and collection facilities. The facilities were modeled after the center at Toukounous Station that the Cooperative Apfen Welli owns and uses for production, but built with better construction materials that are more permanent. The groups noted that Apfen Welli's center is severely degraded due to the impermanent materials that were used to construct it. MADARA is working with the communities to find a way for the women's cooperatives to have access to appropriate cheesemaking facilities.

Next quarter, a participatory cheese marketing study will be carried out to help the women's cooperatives learn how to advance their marketing strategy.

Table 3: Women trained in standard cheesemaking

Villages	Cooperatives	Participation			
		Expected	Men	Women	total
Toukounous station	Niima	22	0	21	21

Tamagorjeck	Dadin Zama	24	0	22	22
	Fara'a	20	0	18	18
Agiguidi	Individuelle	4	0	3	3
Garin Kimba	Mougnal	30	0	29	29
Makani Souleymane	Ounfani	31	0	31	31
	Adaltchi	25	0	25	25
Total		156	0	149	149

Subsector 2.2: New Livelihoods Development

Monitoring and coaching of 146 microenterprises was carried out in the last quarter. Eight were not able to be monitored due to the death of the microentrepreneur (3 cases), migration (3 cases) and prolonged illness (2 cases). MADARA staff carried out coaching and monitoring in order to support the microenterprises to become self-sustaining and employ sound financial and business management practices, connect with local services (financial and technical), and input suppliers. Through these technical visits, several weaknesses were identified, which form the basis of technical support plans for coaching and targeted trainings planned for the next quarter. These weaknesses include poor utilization of business management tools, such as general sales journals and a stock book.

Ten village agents were identified by community members to receive additional capacity building and further support microenterprises. These village agents, along with Mercy Corps staff, participated in a training run by ASUSU S.A. on the role of village agents, good governance principles, partnership strategies, and monitoring. The village agent model, which has worked well in Mercy Corps' previous entrepreneurial programs, is being piloted in MADARA as a way to ensure a local resource that can support individual and collective microenterprises in the future, improve their activity. Village agents received follow up support visits by ASUSU S.A. and Mercy Corps to help them assist microenterprises on issues of group governance and partnership strategies. MADARA is continuing to monitor this approach and, if effective, the village agents will receive additional training in more advanced and practical themes.

As expected, the animal feed businesses managed by the dairy production cooperatives reduced sales due to the rainy season; there was also abundant grazing land available, thus a period of low demand for animal feed. Due to the importance of these animal feed businesses, 72 supervisory missions were carried out across the five businesses over three months to conduct regular monitoring of stocks, support financial management, and ensure general sound management practices. With the reduction of sales, cooperatives proposed to diversify their economic activity, for example producing multi-nutritional animal feed blocks and cereals crushers which can be used to produce animal feed with local materials. MADARA is supporting the cooperatives to analyze the business environment for these activities to have the basis to submit a business plan in the next quarter.

Table 4: Animal Feed Businesses

Village	Product	Quantity purchases (bags)	Quantity sold (Bags)	Cost (FCFA)	Returns (FCFA)	Profit (FCFA)
Makani	What	40	40	412,000	430,000	119,000
		20	20	203,000	215,000	
		116	116	1,148,400	1,247,000	
Garin Kimba	Tourteau	40	40	360,00	370,000	28,750
	Cotton seed cake	60	60	270,000	285,000	
	Wheat	20	15	210,000	161,250	
Tamagorjec	Wheat	60	60	635,000	660,000	30,000

	Cotton seed cake	20	20	95,000	100,000	
Dinkim	Wheat	40	12	600,000	118,250	-481,750
	Tourteau	20	0			
Tchiolé	Wheat	40	40	708,000	740,000	32,000

The past quarter also saw progress around the program's aim to increase access to financial services. Each cooperative has deposited all profits in their group bank account, which was opened in the last quarter. The program is working with the animal feed banks on their business strategy to purchase some feed in the next quarter when prices are lower and store it until the following season when sales increase.

Subsector 2.3: Temporary Employment

As noted above, cash for planting was carried out in the villages of Banguir Bouzayé, Toukounous Station, Toukounous Arzika, Tarkassa and Tanfadara, with approximately \$7,530 paid out to beneficiaries. In total, 1,681 vulnerable households participated in cash for planting (1,237 men and 444 women) reseeding 21.9 hectares and replanting 77.4 hectares with the 24,240 plants produced in the nurseries.

**Table 5: Cash for planting
Reseeding**

Villages	Beneficiaries			No. of days	Rate per day	Amount in FCFA
	Men	Women	total			
Banguir Bouzayé	41	27	68	1	1,300	88,400
Tarkassa	202	18	220	3	1,300	858,000
Toukounouss Station	143	122	265	1	1,300	344,500
Toukounouss Arzika	200	20	220	3	1,300	858,000
Tanfadara	38	22	60	1	1,300	78,000
Total	624	209	833			222,6900

Replanting Trees

Villages	Beneficiaries	Daily rate	No. of days	Amount (FCFA)
Tarkassa	220	1,300	2	572,000
Toukounouss Arzika	220	1,300	2	572,000
Toukounouss Station	331	1,300	2	860,600
Banguir	77	1,300	1	100,100

Total	848	1,300	2,104,700
-------	-----	-------	-----------

SECTOR 3: Nutrition

Activities under the nutrition sector are performing well; internal evaluation results show promising practices and impacts.

SECTOR #3 Nutrition	<i>Objective: Improve uptake of key Infant and Young Child Feeding and optimal maternal nutrition practices</i>				
Geographic Area (s)	Filingué department, Tillabéri region, Niger				
Beneficiaries Targeted	21,000 individuals (3,000 households)				
Beneficiaries Reached (Reporting Period)	1,022				
Beneficiaries Reached (Cumulative)	1, 022				
Subsector: Infant and Young Child Feeding and Behavior Change					
INDICATORS	Disaggregated	Applicable	Cumulative Value Targeted	Reporting Period Reached	Cumulative Reached
Number and percentage of infants 0-<6 months of age who are exclusively breastfed	N/A	Yes	700 (40%)	58%	58%
Number and percentage of children 6-<24 months of age who receive foods daily from 4 or more food groups (to achieve minimum dietary diversity)	N/A	Yes	1,500 (40%)	0	0**
Number of people receiving behavior change interventions, by sex and age (0-11 months, 1-4 years, 5-14 years, 15-49 years, 50-60 years, 60+ years)	Age	Female	Male		
	0-11months	450	450	846	846
	1-4 years	2,100	2,100	4,352	4,352
	5-14 years	5,000	4,000	7,336	7,336
	15-49 years	3,200	2,600	4,968	4,968
	50-60 years	340	250		
	60+ years	310	200		

**Not yet measured

Training of 28 local health and nutrition coordinators (CLSN) from four villages was carried out in the last quarter on the next set of essential family practices and essential nutrition action, including: encouraging pregnant and breastfeeding women to use health centers, healthy diets for pregnant and breastfeeding women, and overall improvement of hygiene and sanitation (food hygiene, personal hygiene, environmental hygiene). The training was held at the health center in Toukounouts Station in collaboration with local health agents in the catchment area. These CLSN implemented 14 community level trainings and discussions on these themes, reaching 581 beneficiaries (502 women and 79 men).

To support the CLSN and their communities to practice these essential health and nutrition practices, MADARA put in place sanitation and hygiene kits in 16 villages. CLSN developed a management protocol for these community resources and a plan for community cleanliness. Despite the fact that the planting season was underway, they organized 15 sessions of community cleaning.

In addition to the hygiene kits, cooking demonstration kits were also distributed in the 16 villages to be managed by CLSN. To date, nine villages, reaching 370 women received cooking demonstrations. These demonstrations showcased healthy recipes for women and children, such as enriched porridge – women returned home with ... recipe/enthusiasm, etc.?

Following cooking demonstrations, the CLSN organized discussions with women about essential family health and nutrition practices promoted by MADARA. Discussion Clubs (26) comprised of 386 women across 9 villages were organized to structure these discussions and ensure more active participation. MADARA worked with the Radio of Filingué to develop and broadcast 12 distinct key messages in the two local languages about breastfeeding and complementary feeding practices for young children, and women's clubs borrowed radios to listen. They were challenged to share these messages with at least five other women. In the next quarter additional messages will be broadcast and a public debate on the radio will be held with local personalities.

Table 8 : Disucssion Clubs in Villages

Villages	Number of clubs	Number of women in each club
Ban Barébaré	3	45
Ban kour	3	45
Ban bouzayé	2	30
Gorou	3	41
Agiguidi	3	45
Maitalakia	3	45
Dinkim	3	45
Tarkassa	3	45
Takoussa	3	45
Total	26	386

In 7 villages, 16 pregnant women pledged in front of their community to practice exclusive breastfeeding after giving birth. For those who gave birth, CLSN conducted home visits in four villages to follow up and encourage the women to practice breastfeeding exclusively for children up to 6 months.

A health agent from the Takoussa health center conducted a technical supervision visit in three villages and feedback confirmed that the CLSN were effectively carrying out their awareness raising and mobilizing activities around essential family practices. The health agent praised the program for a strong understanding by communities of the important health and nutrition practices and noted that pre- and post-natal visits to health centers have increased since the program's efforts. The head of the Takoussa health center remarked that more women are practicing exclusive breastfeeding, according to his observations, than previously. MADARA staff are working to obtain data from the health centers to support these positive findings.

Despite positive results, challenges around nutrition and health practices remain. Women noted the challenge around obtaining diverse foods to increase their dietary diversity; especially given off-season gardening is not widely practiced due in part to water access limitations. Women in Gorou and Agigidi villages noted the long distance to the health center and lack of transport which prevents women from going to health centers to give birth. MADARA is working with CLSN and local health authorities to find solutions to these challenges.

4. Monitoring & Evaluation

MADARA completed an internal evaluation at the end of this quarter to assess the program's progress to date, with more depth than regular monitoring. The evaluation aimed to identify accomplishments, any issues in implementation and needed actions for course correction. Key findings will be shared with stakeholders, including beneficiaries, and are being used to focus the program's interventions over the remaining months of the program.

Sample Key Findings

Animal health

MADARA seeks to increase access to and use of animal health services to protect and restore this core household livelihood. 65% of households surveyed have used animal health services in the past twelve months, and during focus group discussions, animal health was not regarded as a major constraint to milk production. The majority of households use animal health services mainly during the rainy and "cold" seasons, and very few use them in the dry season (26%). The program is looking into this finding, but it may have to do with households having less cash on hand during the dry season (lean season). In terms of service providers, over half of the households surveyed (52%) used state technical services, 36% used the Private Veterinary Service Provider and 12% used unofficial auxiliary para-veterinarians. The majority of services sought were for vaccinations and deworming. One-third of households also sought clinical treatment for animals for more severe illnesses.

Complementary livestock feeding (purchasing animal feed)

32% of households claim to have purchased feed for bovines with the objective of increasing dairy production (compared to 0% at the program baseline). Yet, the quantity of feed purchased and distributed during a period of 60 days compared to the herd size of dairy cows (on average 3 dairy cows) shows that each cow receives a dairy ration of 500g, which from scientific standpoints is very low to boost dairy production.

The evaluation found that each member of the household who owns a bovine is responsible for purchasing and managing supplemental animal feed. Through focus group discussions, this key finding was further explored to understand how household social dynamics affect animal feeding practices. A constraint to producers practicing complementary animal feeding strategies seems to be hesitation around creating tension in the household by only feeding cows his/her own cows.

The evaluation showed that the increased percentage of cows fed with supplemental animal feed during the dry season is a largely a direct result of the dairy cooperatives' animal feed businesses which were established through the microenterprise component of MADARA. These businesses increased access to feed. In all focus group discussions across villages surveyed, the animal feed businesses were noted as the most sustainable activity.

Dairy Production

75% of households at the time of the evaluation had at least one cow in lactation (dairy cow), a finding which continues to demonstrate the region's significant livestock potential and livestock as a core livelihood. The average production per cow per day was estimated by producers as roughly 3.5 litres (during the current rainy season), or a monthly production estimated at 7,875 liters across MADARA's intervention zone. Compared to the baseline, the dairy production rate has not changed (4 liters at baseline during the rainy season). Communities raised their concern of the drop in dairy production during the dry season when there is less

forage, and that cutting and storing fodder during the rainy season to cover this gap remains a possible strategy, however suitable places to store the fodder are a major constraint. MADARA is working with community leaders to find local solutions to this constraint. Overall, those surveyed said that they benefited from MADARA’s trainings on how to maintain and increase dairy production.

Nutrition, Hygiene and Sanitation

One of the most significant changes realized are around health and hygiene. The majority of beneficiaries surveyed said that MADARA helped improve their understanding about hygiene of the household and the general environment, which in turn contributed to a reduction in mosquitos around the house and less sickness from malaria. Trainings in exclusive breastfeeding were mentioned by those surveyed as one of the most positive changes of the program on their daily living conditions. At the baseline, 19% of women surveyed practiced exclusive breastfeeding for infants from 0 to 6 months. This has increased to 58%.

Application of trainings

Of the techniques which MADARA taught and encouraged around livestock health and productivity, treating straw with salt and urea was most appreciated. The least applied and least appreciated technique mentioned is storing cut green fodder in dugouts, as beneficiaries note that the technique is burdensome and results in fodder discoloration, which in turn is not appetizing for livestock.

The training on dairy milking hygiene was mentioned by women as a very useful training, but they also noted that constraints around water access made this difficult to practice regularly, since hygienic milking requires a lot of water.

Overall, about 72% of households having received trainings apply at least two techniques, a satisfactory rate of application. During regular monitoring roughly six months prior, this was measured at 30%.

This table shows a sample of trainings that MADARA carried out, with the percentage of who participated in a training versus how many applied the technique taught.

Training	Received	Applied
Cutting and storing fodder	77%	67%
Treating straw	71%	66%
Making multinutritional salt blocks for livestock	71%	65%
Hygienic milking	76%	71%
Animal health	76%	76%
Exclusive breastfeeding	72%	58%
Hygiene and sanitation (for the household)	81%	73%
Complementary feeding for pregnant women	70%	60%
Using health centers	77%	77%
Business management	59%	56%
Average overall	72%	66%

5. Coordination

During the quarter, MADARA staff participated in OCHA-led coordination sub-cluster meetings for food security and nutrition at the regional level. Mercy Corps joined a newly launched monthly coordination group led by the Public Health Department of Filingué for actors intervening in health and nutrition areas in

Filingué. To better coordinate the production and dissemination via radio broadcast of key messages around health and nutrition practices, Mercy Corps worked with IRC to synchronize health messaging and identify complementary messages.

6. Upcoming Activities

- Targeted business skills training of microentrepreneurs who are admitted for the second tranche of grant funding (ASUSU Partnership)
- Training of select village agents and Mercy Corps staff in coaching skills in the GERME technique (Gerer Mieux Mon Entreprise, a curriculum for entrepreneurs) and ongoing technical support to microentrepreneurs in their business development
- Establish mini dairy processing and collection centers (anticipated funding from Vitol Foundation, with community contributions)
- Targeted participatory dairy marketing study for cheese products
- Learning visit for women's dairy cooperatives to learn packaging and conservation techniques for cheese
- Community mobilization to construct improved storage facilities to stock animal feed and forage
- Technical visits and monitoring of APVs in conjunction with the Ministry of Livestock and the Private Veterinary Service Provider
- Continued cooking demonstrations and Discussion Clubs for health and nutrition