

# SAFE-World Project/Initiative Summary

**Country: Cameroon**

Project/Initiative Title: Heifer Project International HPI) Cameroon Small Scale Dairy Development (SSDD)  
1995 (1974)

Scale: community/ many communities

Nos. farmers: 280 households

Hectares: 750 – (200-250ha improved pasture  
400-500ha organic cropping)

Agro-Ecological Zone: V

Improvement types

1x	2	3 x	4	5 x	6x	7	8	9x
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Success and Limits to spread

Success	Limits
6a	2b, 2c

## A. Key Impacts

### A1 – Productivity

	Before/Without	After/Wit h	% change
Animal 1local breed upgraded	2-3 kg/cow/day	8-12 kg/cow/day	300
Animal 2 crossbreed pure bred	4-8 kg/cow/day	15-25 kg/cow/day	300

### A2 – Impacts on natural capital

-All the dairy cattle are held under (semi-)intensive farming systems (ranging from fenced improved pasture to zero grazing). This limit the environmental problems related to extensive/nomadic herding (overgrazing, track erosion, bush burning, etc...).

-Water pollution and its related zoonotic diseases are reduced by the fact that the water is brought to the animals and not the animals to the water streams.

-Soil fertility and rebuilding of soil structure are enhanced due to the organic manure (both from cow and trees). Farmers can now afford to abandon the shifting cultivation practices they were used to.

-The alley farming, pastures and forage banks (the last two also situated in watershed protection areas) make permanent covered land, reducing evaporation and soil erosion.

### A3 – Impacts on local community (social capital)

As indicated above, HPI's work start with existing groups as a crucial part in their strategy for just and sustainable development. These groups are capacitated through gender workshops, leadership training and of course technical training. HPI in Cameroon has a few women's project, but prefers the mixed groups where gender equity in all aspects of group dynamics is promoted (women and man in leadership positions, sharing of burden and benefits, joint signing of project contracts, etc...).

Community groups in a region will be brought in contact with each other and the building of functional exchange links is promoted. Eventually this can lead to associations of alike producer groups. In these associations technical (indigenous) know-how, marketing aspects and other aspects are exchanged

#### ***A4 – Impacts on households and individuals (human capital)***

The benefits of an improved milking cow to a family are clear. Although it is a full-time job, the benefits are worth it. The least a farmer will get out of it is his monthly income (about a minimum urban wage). This in a situation where most farmers in the area are only having short-term jobs on a non-regular basis. This next to daily milk for the family (and once used to the milk the family will not allow all the milk to be sold to the market). The manure for organic farming and the resulting excess crops to sell to the market are important side benefits.

HPI has seen reversed rural-to-urban-migration due to the fact that the wife was gaining more from her milk sales than her husband was gaining from a semi-permanent job in the capital. Some (peri-urban) farmers are getting a net return that is about 5 times minimum income. This can be noticed in improved nutritional and health statuses: people are able to provide the cash needed for (the less required) health services. Children in large families are able to go to school, due to the cash income from the milk sales.

Farmers are organising themselves in (pre-)co-operative structures, not only for know-how transfer, but also to build a negotiating power towards the dairy plant (price negotiations, milk collection conditions, productive credit applications, etc...).

The National Livestock Research Institute (IRAD) wants to collaborate with HPI and the farmers to do on farm data collection or even do on farm research. The outcomes are being put back through the different extension programs (both HPI and Governmental).

#### ***A5 – Key changes in farm/ regional system***

if considered in annual production the local Fulani breeds produce up to 400-500 kg/lactation (mostly only 1 lactation in two years time). The crossbreed (Fulani x Holstein or Jersey) produces 1000-1500 kg/lactation (having about 2 lactation in 3 years time). After the shift towards market oriented dairy farming the crossbreed produces up to 2500-3500 kg/lactation (having each year one lactation). The introduced pure-breed Holstein and Friesian cows produce 4000-7000 kg/lactation (having each year one lactation). That is a 35-fold production increase in 25 years, with a 10-fold increase in the last 5 years.

Organic manure production is an important by-product: 231 cattle producing on the average 7kg/cow/day of dried and used manure (totals to 500-600 ton per year). It is used to fertilise alley farmed crop farms, as the nitrogen fixing trees (about 50,000 per year are planted within the dairy program) are promoted both as forage and green manure.

Changes in input use: ...As indicated the organic manure (animal and trees) has replaced the expensive (and scarce) chemical fertiliser, and has improved the soil fertility (short and long term).

Change in local/ regional food security: ...With increasing milk powder prices (decreasing subventions from the European Union) this pilot has proven that milk production is viable in this area of Cameroon. If this project can be expanded, and even copied to another area, Cameroon could reduce drastically their import of dairy produce.

## **B. Types of Sustainable Agriculture Improvements**

- Type 1: Better use of available renewable natural capital  
 Type 2: Intensification of single sub -component of farm system  
 Type 3: Diversify by adding new productive natural capital and regenerative components  
 Type 4: Better use of non-renewable inputs and technologies  
 Type 5: Social and participatory processes leading to group action for making better use of natural capital  
 Type 6: Human capital building through training-learning programmes  
 Type 7: Access to Finance  
 Type 8: Add value by processing to reduce losses and increase returns  
 Type 9: Add value by direct or organised marketing of produce to consumers

	Yes/No	Narrative
Type 1	x	Organic manure production More emphasis on dairy farming Semi (i.e. paddcking) and intensive (i.e. zero-grazing) dairy farming: improved pastures, fodder banks, alley farming (agroforestry); high standard but appropriate training and follow-up priority,
Type 2		
Type 3	x	where appropriate upgrading of genetic potentials of the cattle (including importation of Irish Holstein and Kenyan Friesian breeds).
Type 4	x	importation of Irish Holstein and Kenyan Friesian breeds
Type 5	x	The dairy farmers, being the first group of farmers to be helped in the HPI Cameroon program, have had undergone many different approaches: From individual assistance to groups assistance; from “going round” to propose assistance to let the groups come to request for assistance; from starting a co-operative for the farmers (top-down) to trying to stimulate a movement from with-in (grassroots, bottom-up), etc... most strategies were tried in some part of the 25 years of HPI Cameroon existence. What has turned out to work the best is (trying) to screen for existing (genuine) groups that have heard of HPI (from already assisted groups) and which come with a specific proposal for assistance from HPI. After that a participatory assessment of the group situation will check if their proposal suits their conditions (e.g. a group can request for dairy cattle, but if e.g. land pressure or water availability is a constraint, it is possible that the group reconsiders and goes for assistance with dairy goats).
Type 6	x	In view of sustainability, HPI (which typically assists 3 years financially and 2 years additional technical follow-up) makes sure that the groups are embedded in the local structures (e.g. other groups, extension services, Vet. Services, (rural) credit institutions, and other (Non) Governmental (research) services locally available). In case HPI might move to another area the groups will be self-reliant to continue to grow.
Type 7		

Type 8		.
Type 9	x	<p>This project succeeded partly/mostly because there was an outside businessman who started a dairy processing plant (yoghurt and cheese). The plant was set-up as a combination of private business and co-operative structure: the farmers have a seat in the board of the factory (they have shares), but the businessman will eventually keep 51% of the shares (there are still shares in the hands of the financing party).</p> <p>The problem of the farmers has been for 20 years that they were not able to market themselves (fresh or processed; individually or in an association) enough of their milk to make it profitable to invest more in their dairy farm (it remained a side job). Since the factory is buying all the milk the farmers are willing to sell, and the factory pays a milk price comparable to the world market (i.e. not too high, but very regular), the farmers are having a fixed income. Knowing this, the farmers are investing more in their dairy farm to make it a full-time job</p>

### C. Key Lessons: Success, Spread and Constraints

#### ***C1 – Key Lessons Learned***

Work bottom-up, grass roots oriented, participatory etc... (not surprising), but a commercial aspect in it is crucial too. Bringing farmers to a subsistence level is one step, but if nothing is done after this step, everything might slide back to zero. As such a follow up to assist farmers to enter the monetary economic/market driven world could be as crucial.

#### ***C2 – Aspects of local/national context contributing to success***

The climate is very favourable (altitude 1,500 m; 2,000 mm rainfall; short dry season (up to 4 months)).

#### ***C3 – Limitations preventing spread***

Milk powder import policy is in favour of milk powder, as there is not yet enough fresh milk produced in the country as a whole, to justify a change in the policy.

#### ***C4 – Policy issues***

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Economical situation, corruption at different levels which disrupts businesses from doing their business (competition is falsified, supplies are not guaranteed, etc...)

### D. Contact Point for Project/Initiative

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As we are a livestock oriented organisation, we have to admit that we do not have scientific evidence of changed crop yields as yet. We do have farmers' testimonies about improved yields. It has become a subjective (as compared to measurable) parameter for the yearly Golden Talent Award. And we have striking examples of farmers that have stayed on the same plot for the last 10 years i.e. without the traditional shifting cultivation techniques)

HPI works with the principle of Passing on the Gift/Credit. The words Gift or Credit can be inter-changed depending on the cultural background. The principle remains the same: i.e. any part of the assistance received from HPI will be returned to their own community. Training, cash (part of the cash investment needed for local stables, improved pastures, etc...) and the animal obtained from HPI will have to be returned (in kind, in cash or a combination) to the group. This can be done in the form of workshops to new farmers in the group (under supervision of HPI). Another option is to establishing revolving funds for supplies provided by HPI. And the centre of this principle: the animal given by HPI (under contract, and after the group has qualified the individual farmer on participatory approved criteria) will have to be passed on in the form of one (sometimes even two) off-springs to a new, resource limited member in the group. As such the initial investments will be reused, and the group can continue to grow without major outside investments.

A second phase is to assist the farmers that past the above phase successfully by introducing them to a rural credit institution. Instead of HPI having to re-invest in a farmer that want to grow further, HPI assist successful groups to apply for productive loan schemes from the local credit unions (CamCCUL Ltd. In this case). It helps the farmers first to grow faster towards a market oriented farming. Further, it helps to build their credit worthiness for the future, and introduces them to the monetary market economy.