

Mdukatshani Rural Development Project (MRDP)

(150-003-1123 and 150-003-1135ZG)

Evaluation Report 2019

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Glossary

BRICS	Brazil, Russia, India, China, South Africa (countries in transitions, members G20)
CAHW	Communal Animal Health Worker
cap.	Capita
G20	Global 20 countries (a group of powerful countries: OECD, G7 and BRICS)
GAP	Goat Agri-Business Project
GDPppp	Gross Domestic Production (people purchasing power)
HDI	Human Development Index
HPSA	Heifers Project South Africa (national NGO partner of GAP)
IVG	Indigenous Velt Goats association
KZN	Province KwaZulu Natal
KZN DARD	KwaZulu Natal Province - Department of Agriculture and Rural Development
LA	Livestock Association
M&E	Monitoring and Evaluation
MRDP	Mdukatshani Rural Development Project
MRDT	Mdukatshani Rural Development Trust
NFSR+D	New Farming System Research and Development
NGO	Non-Governmental-Organisation
PMB	Pietermaritzburg (capital of KZN)
PRA	Participatory Rural Appraisal
R	Rand (currency South Africa, in May 2019: 15 Rand \approx 1 Euro)
RRA	Rapid Rural Appraisal
RSA	Republic of South Africa
RSA DLA	Republic South Africa – Department of Rural Development and Land Reform
UN	United Nations
US\$	US-Dollar

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1 Executive summary

1.1 Brief description of Mdukatshani and the project MRDP

Mdukatshani is a South African non-profit Non-Governmental-Organisation (NGO) and was founded *and registered in 1975 and is based in Msinga, where the main activities are carried out* (Appendix 2). The main project of Mdukatshani is the “Mdukatshani Rural Development Project” (MRDP; Appendix 5) and started in 1989. After many years of activities in land reform, MRDP changed 1999 into capacity development for sustainable livelihood of rural households through empowering especially of women and youth in agricultural production and productivity. Household food security with chicken farming and sustainable gardening systems in the commercial gardening plots at the furrow irrigation scheme was the beginning. In 2011, MRDP focused towards chicken and goat farming and developed and implemented appropriate technological models for sustainable livelihoods through improved livestock keeping, animal health management and entrepreneurship in traditional goat and chicken keeping. Misereor supported this project under the project acronym MRDP.¹ In 2014, MRDP was successful in networking and scaled-up the “goat component of MRDP” into the new established “KZN Goat Agribusiness Project” (Appendix 11) and a total budget of 75.5 million Rand (about 5 million Euro) for the period of 2015-2021.

1.2 Goals and objectives of the project MRDP

The overall goal of MRDP is to contribute towards improving the livelihoods base of rural communities in the Msinga area through increasing livestock and agricultural productivity while using locally available resources wisely for long-term sustainability. The project works with two distinct client groups: a) Local people, especially women farmers, livestock associations, youth, and school children and b) External stakeholders, especially Government agricultural extension staff, other officials of the Provincial Department of Agriculture and Rural Development, Municipal officials, and auctioneers’ academic institutions and researchers. The following objectives and indicators have been agreed in the support of Misereor for MRDP (Misereor project contract 150-003-1135 ZG):²

- **Objective No. 1:** Improved livestock productivity of farmers in Msinga through enhanced livestock health and management.
- **Objective No. 2:** The number of women and youths involved in income-generating livestock and value-adding activities has increased.
- **Objective No. 3:** Farmers are collaborating with researchers, government and NGOs to find and implement research solutions that are relevant to locally appropriate, sustainable farming systems.
- **Objective No. 4:** Government and policy makers are informed of challenges and opportunities facing African small-scale livestock farmers, particularly women, in rural areas.
- **Objective No. 5:** Mdukatshani follows Basic Conditions of Employment Act.

1.3 Aim and objectives of the evaluation and methodology

In May 2019, the MRDP activities and outcomes were evaluated by Prof. Dr. agr. Gerold Rahmann (international) and Dr. phil. Monique Salomon (national). Following objectives have been agreed:

Overall question: To what extent is the intervention appropriate and effective in solving the main problems of the rural population in Msinga as identified by MRDP?

¹ In this evaluation report, the name “Mdukatshani” is used for the NGO, and “MRDP” for the project, supported by Misereor from 2014-2020.

² The objectives from the first project (150-003-1123; 2014-2017) were slightly different from the second Misereor project contract (150-003-1135; 2017-2020). Conform to the Terms of Reference, only the objectives for the second period have been used for this evaluation.

The **objectives** are:

- **Relevance:** The extent to which the project is suited to the priorities and policies of the target group, the organisation responsible for the project and the donor organisation.
- **Outcomes and Impacts:** The positive and negative changes produced by a project, directly or indirectly. This involves the main outcomes and impacts resulting from the project. The evaluation should be concerned with both intended and unintended outcomes and impacts.
- **Effectiveness:** A measure of the extent to which a project achieves its objectives as laid out in the project contract, i.e. a comparison of the intended outcome with the observed outcome (see 'Outcomes and impacts' above).
- **Efficiency:** In general terms, efficiency is a measure of the relationship between outputs and inputs. In the first instance this means looking at the qualitative and quantitative products and outputs of the project in relation to the resources (i.e. inputs) used. In particular cases, it is helpful to relate the effects of the project to the resources used.
- **Sustainability:** Sustainability is concerned with measuring whether the benefits of a project are likely to continue after funding has been withdrawn. Benefits need to be environmentally as well as economically, technologically and socially sustainable.
- **Specific questions:** Ecological impact, outsider views and integration into the household?

The used **methodology** has followed a participatory and holistic system approach and the evaluation principles of Misereor have been considered. Data have been collected from May 8-27, 2019 (full itinerary of the evaluation is found in Appendix 6). In total, 23 vis-à-vis interviews, 14 target group discussions, 2 MRDP staff meetings, 4 observations of MRDP/GAP activities, 3 target group meetings, visiting 2 different GAP project locations (1 “with MRDP”: Mzinyathi and Nkosi Langlibalele, 1 “without MRDP”: GAP in Zululand), observing 20 goat/sheep herds, assessments of 6 supermarkets, and observations on 1 agricultural show in PMB, several farming system with and without livestock, ut not least and last secondary data collection have been carried out.

1.4 Key findings and an overall assessment of MRDP

The MRDP works within the traditional structures that govern the communities of Msinga, and partners with municipal and Provincial Departments to offer development support and services. The project successfully facilitates the inclusion of women and youth in development and helps grow the local economy through value chain development for rural goats and chicken.

The project is **relevant** to rural households in many ways: it solves problems in goat and poultry keeping, addresses youth unemployment, generates interest in agriculture among school learners, and provides support where Government services in animal production and veterinary services are lacking. The project also boosts the local economy by removing trade barriers for rural goat keepers, and strengthens the commercial agricultural sector with indigenous goat breeds that are suited to local conditions. The MRDP is making an **impact** and is stimulating inclusive participation of rural goat and poultry keepers, and particularly women and youth, at various levels in the livestock value chain. The project has been **effective** in improving goat and chicken production, reducing mortality, increasing community knowledge on animal husbandry, vaccination and treatment, generating income from livestock sales, value-adding, and ‘paravet’ services, and strengthening self-organization and local livestock management structures. The MRDP has initiated and supported research by University students, the Department of Agriculture’s research station, and experiments by farmers. Not all research has been successful, and a coherent research agenda and on-farm protocol are lacking. Innovations developed and lessons learnt are documented in well-developed training materials and other publications. However, a dissemination strategy is lacking to reach and influence specific audiences.

The project is run **efficiently** and in a cost-conscious way. The MRDP costs are carried for 76% by Misereor and 24% by Government partners. The GAP NGO-Government partnership has great potential as Government-managed research and extension model for animal husbandry and veterinarian services.

Total cost for project infrastructure and operational costs are low. The 55% share for salaries is justified considering the project's investment in developing the capacity of a range of beneficiaries: women, youth, livestock associations, school learners, Government staff at local, Provincial and national level, and private sector actors. This investment is aimed at the Government adopting this as service delivery model. Mdukatshani as organization is well run with motivated staff who are focused and effective in performing their daily work. The organization is in a transition from a pioneering life stage into a fully-fledge professional organization. A comprehensive organizational development intervention can help to formalize and establish systems and processes that support all operations, are accessible and understood by all, and keep daily operations aligned with the organization's vision and strategic direction.

The MRDP has been designed with **sustainability** in mind. However, the main stumbling block are the Government partners who have been inconsistent and fallen short in their financial support to the project. This has been a contributing factor to the high turnover of community animal health workers (CAHWs) who are pivotal to the success of the GAP research and extension model. The project will require another three years to bring the Government fully on board, develop and adopt this model for service delivery, and shift formal markets in favour of rural livestock keepers. Better understanding of different livelihood scenarios for youth employment, will help guide the project to recruit and retain CAHWs and to turn CAHWs into thriving 'agripreneurs'. The project's M&E function must be developed to produce on-demand statistical evidence of impact. This includes the long-term ecological impact, which requires a forecasting of how increasing livestock numbers will influence availability and regeneration of trees, shrubs and grass/herb vegetation.

The overall assessment of the MRDP work was:

Good:

- The *relevance* for the target groups was and is still valid.
- The *outcomes and impacts* are good and GAP an excellent extension service model.
- MRDP does an *effective* and convincing work in the context of the objectives (qualitative).
- The *efficiency* is comparable to other NGO driven projects.

Not so good:

- The *sustainability* of the innovations is not convincing (exit strategy missed).
- Objective and indicator-based reporting (baselines, annual reports using available data) is lacking and need significant improvements (convincing evidence of results is not given) (quantitative).

Overall assessment:

- **The evaluation team scored MRDP overall work with "good".**

1.5 Key recommendations

1. Allow another three years for this project to develop a viable model for animal husbandry and veterinary services that the government can adopt. Develop a strategy for Mdukatshani to phase out these activities and focus on other community priorities. Invest in strengthening capacity of public and private sector to take over the well implemented ideas of MRDP, and to scale them up into other regions (**example GAP**).
2. Strengthen the governmental partnerships and facilitate actual buy-in through allocating dedicated funds and other support to the project.
3. Further develop the CAHW programme into a viable model for enterprise development in agriculture supported by an appropriate financing mechanism.
4. Invest in a coherent research agenda and strategy including farmer led innovation.
5. Mdukatshani should invest in organisational development to manage the transition from life stage 3 pioneering to a professional organisation.
6. Optimise the M&E function to generate quantitative and qualitative evidence on demand and produce an annual status report on livestock-based livelihoods.

2 Description of the assignment and the approach and methodology used

The evaluation was designed in line with the values and principles of Misereor and Mdukatshani (see also Stockmann 2000, BMZ 2009, Misereor 2019). The Terms of Reference for the evaluation have been agreed by Misereor, Mdukatshani and the evaluators before the evaluation contracts were signed. The evaluation has applied a participatory (PRA and RRA; Chambers 1992) and system approach (NFSR+D; Rahmann & Homann 2012) to facilitate a joint learning and reflection. The methodology has encouraged an open dialogue and constructive criticism, and ensured that:

- Everyone’s contribution was important, and each voice counted
- The process was well-designed and explained in an easy way for understanding
- People drove the process as individual and group
- The processes and spaces are safe and in still trust
- Everyone was included and no one was left behind

Following activities have been used and carried out for data collection:

- Desktop study of all relevant documents
- Joint planning of schedule and methodology (evaluators, MRDP)
- Inception workshop with MRDP staff and board members
- Interviews and discussions with key informants, stakeholder, farmers, MRDP staff and board members, scientists, government officials, and NGO partners
- Focus group discussions with target groups, including women, youth, livestock association members, and Community Animal Health Workers.
- Observation of staff in action, the impact of project components “on the ground” and the socio-economic and agro-ecological frame conditions (NFSR+D).
- Assessment of systems for data analysis and M&E
- Feedback workshop with MRDP board and staff of preliminary findings and recommendations
- Presentation and discussion of findings at Misereor/Aachen

The first draft of the evaluation report has been submitted by evaluator GR to MRDP CEO RA on June 14 for his perusal. Report discussion with the evaluator MS was done on June 19, and given amendments and comments incorporated into the delivered report. The de-briefing to Misereor has been done by GR on August 26, in Aachen. Additional suggested amendments have been incorporated as well.

3 Organisation of the mission

A team of two consultants have carried out the evaluation: a local consultant hired from the local project MRDP and an international consultant hired by Misereor. The team has work closely with the MRDP Programme Director GM and other staff. MRDP staff did assist the evaluation team with field logistics, travel directions, identifying key people, setting up of meetings and interviews, and translation. Translation was done by HPSA Programme Coordinator, Nhlanhla Mthembu.

Table 1: Itinerary of the evaluation (overview)

Date	Activity	Persons involved
May 9	Arrival, briefing MRDP	Evaluation team, Rauri Alcock (RA, MRDP), Marisia Geraci (MG, GAP)
May 10+11	Experimental station Cedara in Hilton, Office Mdukatshani in Hilton; Project documents study	Evaluation team, RA, MG, MRDP staff (+7), scientists, Msinga farmers
May 12-19	1st field visit: understanding of project activities: dipping goats, kids and chicken experiments, women and CAHWs training, markets, Livestock Associations LA, “School	Evaluation team, MRDP/GAP staff, farmers, CAHWs, chiefs and local municipality representatives, LA members, pupils from “School Animal Health Club “, many

	Animal Health Club “, Mdukatshani farm, non-Mdukatshani influenced GAP districts	others (youth, village people, non-stakeholder)
May 20	Intermediate meeting of MRDP and GAP staff to wrap-up, focus evaluation for coming week.	Evaluation team, RA, MG
May 21-22	2nd field visits: collecting missing information and outsider-views	Evaluation team, MRDP staff, LA members, women, CAHWs, youth
May 23	PMB: Province Vet Service, Dep. Rural Development, University KZN, individual scientists	Evaluation team
May 24-26	Workshop “Preliminary Results of the Evaluation “, Royal Agricultural Show, IVG, departure GR	Evaluation team, MRDP: staff, board members

(a detailed itinerary is found in Appendix 6)

4 Chapters dealing with the questions and issues addressed in the evaluation, with particular emphasis on detailed outcomes and impacts identified.

Terms of References: The evaluation seeks to assess progress made towards the project’s aim and objectives, and to generate recommendations for the MRDP to make adjustments and steer the project in the right direction.

4.1 Short description of relevant livestock farming systems

The South African government is faced with the multiple challenges of ‘dual economy’, legal pluralism in governance, and geo-spatial inequality, created under colonial and apartheid-rule. Contradicting post-1994 policies, influenced and constrained by global economic forces, have increased the already high levels of inequality, and widening gaps between rich and poor (Oxfam International 2013), urban-rural, and formal-informal sectors. Accelerated processes of population growth, urbanization, agricultural expansion, urban migration, wage labour and monetization of the rural economy, further impact on the potential of rural livestock keeping as viable livelihood strategy.

According to StatsSA (2019), while 12% of South Africa’s land can be used for crop production, only 22% of this is high-potential arable land. The greatest limitation is the availability of water, with uneven and unreliable rainfall. Around 1.3-million hectares are under irrigation, and around 50% of South Africa’s water is used for agriculture.

South Africa has high productivity areas that are mainly farmed by multinationals and large, usually white-owned businesses. The large part of the rural areas that have been settled by African farmers were settled by Apartheid planning and most of this land that they were settled on is considered unproductive. 70% is semi-arid *thornveld*³ and used for extensive browsing, like in Msinga and Nkosi Langalibalele. Most people in these municipalities, like all-over KwaZulu, live in rural areas and practice small-scale farming (Table 2). Agriculture and particularly livestock is important in the Zulu culture (Appendix 4), the economy and to utilize the local natural resources. For example, more than 80% of the 177,577 people in Msinga municipality were active in agriculture, and therefore 73% only in livestock, compared to 6% who do only cropping (mainly small scale vegetable production) (SA census 2016). Usually a livestock household does keep cattle, goats/sheep and chicken. MRDP 2018 survey data taken in 49 dip tank areas showed in average of 3.5 cattle, 14 goats/sheep and 15 chicken per household (n=8,044). Smaller as well as much bigger herds are possible, and also livestock owners, who keep only one or two species. Semi-arid climate (Figure 3), thorn-bush vegetation (Picture 3), low productive (Figure 4) and stony environment are the frame conditions for farming.

³ The typical natural vegetation in KwaZulu is called *thornveld* and consisting of thorny acacias and aloes. Tall perennial grasses and flowering herbs occupy most of the open ground, if not degraded, over-utilized (end of the dry season or droughts) or other reasons.

Table 2: Agriculture in the project area Msinga and Nkosi Langelibalele

	Msinga	Nkosi Langelibalele
No. of households	25,000	10,000
No. of households involved in agriculture	20,000 (80%)	7,000 (70%)
No. of households involved in livestock production	14,283	3,478
No. of households owning goats	10,738	2,375
1-10 goats	7,308	1,715
11-100 goats	3,408	651
>100 goats	22	5
No. of households owning only goats	2,221	414

Source: SAsat 2011, GAP 2015 (these figures are estimations and should be not taken as 100% correct)

Cattle (mainly the local Nguni breed) are the most important livestock for status of the patriarch and the wealth (‘savings’) of his family (the owner is even buried in the kraal of his cattle) (Picture 5). Goats (indigenous breeds) are the second important animal for the livestock keeping families. They are for ‘pocket money’ for easy transactions (1,000 Rand/goat compared to 11,000 Rand/cattle) and have also a sacrificial function for many ceremonies in the Zulu culture. They are slaughtered for social events (marriage, births etc.). Sheep (local fat rump breeds) are kept as well, but less in goat number. ⁴ They are for mutton production and ‘pocket money’ as well. Both species are owned and managed by men and women. Chicken (local breeds) are usually kept by women for home consumption and micro business (80% of all households). Like all livestock, also chicken have a sacrificial function. Traditional healers use special coloured chicken for healing ceremonies.

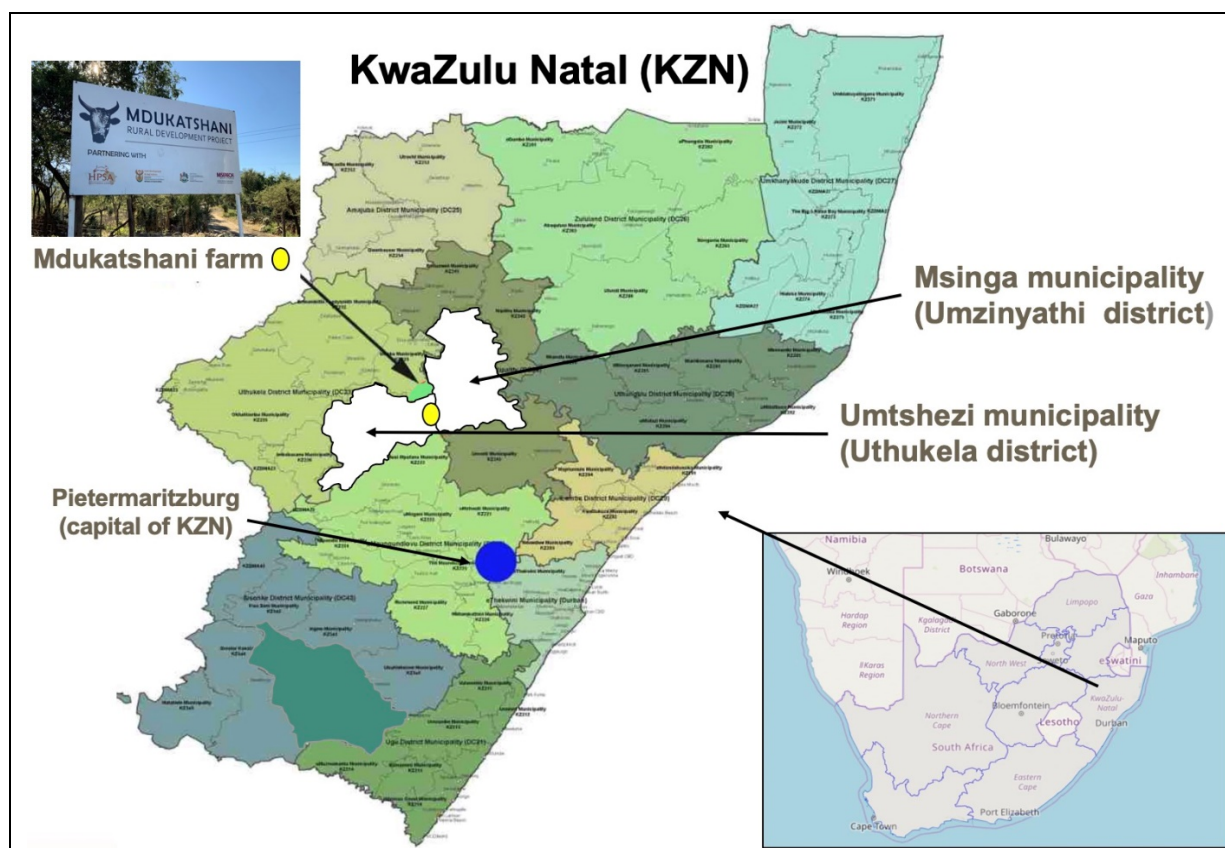


Figure 1: Mdukatshani project area

⁴ The GAP 2015 and records talk about goats, but at dip-tank actions it was observed, that goats and sheep are counted and treated as one. The relation of goats and sheep was 5 : 1 in the observed 20 flock cases. Some of the herds observed had only goats sheep once common are less common with bush encroachment reducing grasslands that they rely on.

In the night all livestock is kept in kraals (cattle, goats, sheep) or stables (chicken, pigs), to avoid losses by thefts and predators (Picture 9). While day livestock is roaming around to find fodder, without herders. Only goat kids and lambs below 2-month age stay while day in the kraal and wait for the mother till the afternoon for suckling. Cattle move in 1 to 2 km distance to the kraal, goats go up to 3 to 5 km, as scientists found out in Msinga (Kraai and Shrader 2018) and chicken and pigs roaming around close to the homestead. In the evening all livestock finds their own way back home (kraal, stable) without any herding (co-existence of people and livestock).

Goats are browsing the more or less scattered *Acacia spp.* (main spp. is *A. tortilis*) up to a horizon of 2 m (Picture 2). Levels above 2 m are not reached by goats but can deliver additionally fodder if manually collected (pots and leaves). This is part of the MRDP capacity development for farmers via the CAHWs. Probably 50% of available *Acacia* fodder is not used in recent systems (see Figure 4, Picture 3).

Grass/herbs are also an important fodder in the free grazing system, but often over-utilized (competition with cattle) and they are less drought tolerant compared to shrubs and trees (Ludwig et al. 2018). Many areas in Msinga showed already in May 2019, at the beginning of the drought season, low quality and density of the grass/herb vegetation. In dry seasons, grass/herbs have only low quality and are “standing hay”, in quality just enough for animal subsistence. Under drought conditions and in the dry seasons, *Acacia* trees are the main and a protein rich fodder resource. Goats do not debark *Acacia* trees. Therefore, they do not destroy the bush/tree vegetation (even in the kraals remaining *Acacia* trees are not dead, Picture 4).

The problems of the free roaming livestock are diseases. Most important disease factors for herbivores are vectors like prevalent ticks (e.g., heartwater, East Coast fever; see Seifert 1996) are nearly everywhere in the bush environment. The second difficult health problem for herbivores are endo- (round and other worms) and ectoparasites (mites, flies). Because of MRDP, these health problems are managed with dips (against ticks and mites) and drench (endo-parasites) (Babayani 2016; Picture 8). To get tolerance, goat kids gets antibiotic treatment against heartwater before first grazing/browsing (Seifert 1996; Picture 22).

Chicken/chick losses are due to predators (hawks, pigs) and thefts (local people), but, apart from simple shelters for the night, full day chicken housing and nest constructions for laying eggs are usually not known as chickens scavenge rather than being fed (Picture 13, Picture 14).

4.2 Relevance

The extent to which the project is suited to the priorities and policies of the target groups, the organisation responsible for the project and the donor organisation. Following questions have been considered:

- To what extent is the intervention important for the target group (for example, does it focus on an important problem/bottleneck)?
- To what extent are the initial objectives of the project still appropriate?
- Are the planned activities and outputs of the project consistent with the project objective and the development goal (coherence of the planned chain of causality)?
- To what extent are key role players adopting the philosophy and modus operandi promoted by the project?

The project works with two distinct target groups:

- a) **Local people:** especially women farmers, livestock associations, youth, and school children.
- b) **External stakeholders:** especially Government agricultural extension staff, other officials of the Provincial Department of Agriculture and Rural Development, Municipal officials, and auctioneers research institute's and academic institutions.

4.2.1 Relevance for local people

Governance in South Africa is characterized by legal pluralism and involves an uneasy and ambiguous co-existence of customary law, colonial law, modern State law, and private property law. Land management powers have been delegated to local institutional structures and regulated through the Constitution and several pieces of legislation. Traditional leaders are recognized as ‘custodians of culture, tradition and custom’, who fulfil an advisory role, and facilitate development and service delivery in partnership with municipalities (Appendix 4). MRDP works within these traditional structures to strengthen their functioning, facilitate inclusion of women and youth in development efforts, and build new relations and networks to grow the local economy.

The evaluators heard very often, that small-scale farming is not considered and appreciated as “real farming” by the government and farmers organisations. They are just “animal holders” or “backyard gardeners” for subsistence purposes. This has impacts. It could be observed, that small-scale Black farmers like those in Msinga and Nkosi Langalibalele have not received comparable structural support, resources, R&D, extension services or attention by the government and private business support in the past like intensive large-scale farmers. There is also a knowledge and conceptional transfer gap from “commercial farming” toward “communal farming”, despite they live and practice close to each other. E.g., in Weenen, it could be observed, that large-scale farmers produce intensive and successful on fertile and arable cropland like in developed countries (high external input – high output systems) and – vis-a-vis on the other side of the asphalt road – extensive small-scale Black farmers produce on low fertile and sloppy land with simple/no infrastructure, limited and seasonal rainfed water, local breeds and seeds on natural and degraded *thornveld* vegetation like in less developed countries throughout Africa (no/low external input – low output systems) (see also Sato 2018). Policies and management concepts for intensive large-scale farming (“commercial farming”) are not suitable and applicable for small-scale farming. Own adapted concepts have to be applied for development strategies (Chamberlin et al. 2014, Rahmann et al. 2019, GAP 2015).

Women farmers

Although Zulu society is considered patriarchal and can be seen as male-dominated, the effects of the labour tenant system, migrant labour, men being killed in factional wars and AIDS related death, means that South Africa, and especially the rural areas, are dominated by women headed households. As a result, many of the assumed gender-based tasks have shifted. Older African women have always had authority over every-day homestead life.

Customary rights to land and livestock are not static. For example, a woman’s recognized rights shift and increase as her position in the household and community changes from young, unmarried daughter to married wife and widow. In Msinga, customary law has adapted to these new realities by traditional authorities recognizing widows as head of household and allocating land to unmarried women for housing and agriculture (Alcock et al 2004; Cousins 2011).

In this traditional Zulu culture (Appendix 4), women manage homestead responsibilities although society dictates that they follow the decisions of the male household head. A patriarch can have more than one wife. Women care for household and children, and work for subsistence purposes with handicraft, gardening and keeping small livestock, chickens but also some goats. Many households are headed by woman (Msinga 66%, Nkosi Langalibalele: 50%; GAP 2015), because the husband / patriarch is dead or on labour migration for a longer time. This creates difficult cultural situations: women have to act and decide like the patriarch. Many live in increasing poverty.

The MRDP does give women support and make them less economic depend from the patriarch and grants, livestock like chicken and goats are a good way. Most of the female headed households already keep livestock (70%). Chiefs and patriarchs accept the activities of women in improving production and increased productivity of chicken and goats. Improved livestock keeping does not only improve women independency but also household nutrition. Diseases, predators and thefts are the most important

problems in goat and chicken keeping. Health care and protection against predators/thefts are the most important support and can reduce the mortality of goats kids (60-80% were mentioned) and chicks (80-100%) significantly (20-30% for both). Because chicken and goat keeping does cost no or only little cash money (free fodder resources), every surviving kid or chick does contribute to household income or improved nutrition. A goat has a market value of 1000 to 2400 Rand (60 to 160 Euro) and chicken 50 to 100 Rand (3 to 6 Euro), if normal size and just for food or special colour and shape for sacrificial purposes or traditional healers.

Livestock Associations

Every dip tank (157 are in MRDP area) has a dip tank group, where livestock keepers are members. They elect a chairperson, and all chairpersons of a municipality elect the board of a Livestock Association (LA) of the municipality. All board members are livestock keepers, and usually only men. Their function is to have “one voice” for all aspect related to livestock keeping in the municipality toward governmental authorities and to organize markets (auctions etc.). These LAs have an important role, but many of them only low capacities in fulfilling these functions. Many of them are not well educated, have only little experience and knowledge in negotiations and communications inside and outside of the rural world of the Zulu. On the other hand, they act and decide in the traditional cultural context with focus on cattle and men issues. Women interests, like markets for chicken or goats, are usually not on the agenda of LAs. Capacity development is important to strengthen LAs, to improve livestock farming in the municipalities and to help to introduce innovations in the villages. The comparison of the 2 visited LAs (Nkosi Langalibalele and Msinga twice) have shown, that one gave a very weak impression, because no strong and experienced leader, and the other a strong impression, because members were experienced (some are more than 10 years LA board members) and trained in capacities by MRDP (the first goat dip tanks interventions in Nkosi Langalibalele).

Youth

Young people are the future, and it should be a good future, in their own, as well as MRDP and Misereor’s opinion. Like everywhere on the world, good food, nice cloths, mobile phones, friends, cultural events, education, good accommodation, economic and social security, and family planning are wishes of the youth in Msinga. Internet and modernised towns in Msinga gives an idea, what that could mean. for such a future people need money, but 7,867 households in Msinga and 2,395 households in Nkosi Langalibalele had no income by job, and the average household income in Msinga is only 15,000 Rand per year, half of number of households in Nkosi Langalibalele and KZN average (STATSSA 2016). There are only few jobs available in rural area and the municipalities of Msinga and Nkosi Langalibalele to earn money for a better life. In Msinga only 10% and in Nkosi Langalibalele 21% of the youth have employment apart from work in the household and with livestock, much lower compared to 39% for whole RSA and 31% in KZN (GAP 2015, Census 2016; see Table 4). There are four main sources for income generation in Msinga and Nkosi Langalibalele:

1. Money earned outside the area: Many young men try to find jobs out of Msinga. Of course, they like to have good governmental or private business jobs, but usually they find only jobs as casual workers in the big cities, on large-scale farms or the mines of the country. It is becoming more difficult to find even these low-salary jobs. Unemployment becomes a problem throughout South Africa (see Table 4). Interviewed young men gave already up to find jobs and preferred to stay in the area.
2. Informal small-scale handicraft and trade: Usually, young women do not look for jobs outside of the area. They and their parents have high expectations on family planning in the area. Therefore, they stay usually at home and do not search for jobs. But they work for subsistence or produce little things (grass and leather work, jewellery, cloths, household and building material) and close to the river “dagga” (cannabis), for “small money”. They also work ‘tog’ informal daily labour in seasonal tomato picking or the like
3. Grants/pensions: Since some years, grants/pensions (brought in by the post-Apartheid government) are paid for widows and orphans (“all people wanting grants, thus claim their children are

orphans”). Most of the rural families receive this grant (about 100 Euro a month old age and 30 euro for children) and it becomes approximately one third of the available money for the household.

4. **Agriculture:** Agriculture is usually for subsistence (crop/vegetable production) and status (number of livestock). Crops and livestock are sold, if money is needed.

The Communal Animal Health Workers (CAHWs)⁵ are an option for some young men and female to find income in the homesteads. Many male CAHW have left after a while (about 50%), to find a job in the cities. This is a problem in effectiveness and malinvestment in capacities development of GAP/MRDP. Women are better for CAHW function, because they stay at least in rural areas, even if they marry and move to another homestead. CAHWs are obliged to find income with veterinary service, protein brick making, goat leather work and fodder shredding. But the CAHWs had mixed success. The veterinary service is considered by farmers as service-fee-free, brick making cost money and there are risks in losses. Leather work and fodder/acacia pots shredding seems to be good income sources, and even manure sales from the kraals, which is not integrated into the income generation support by MRDP yet (lesson learned).

School children

Despite 37% of the population in Msinga is illiterate but about 49% have completed Grade 9⁶. This is less than in Nkosi Langalibalele with 11% and 69%, respectively. Today, school is compulsory in South Africa.

Pupils are important in cultural change: a) they are the next generation, b) critical thinking should be stimulated from a young age, and c) they have influence in the families. The schools are a place where new innovations, e.g. in animal husbandry, can be introduced and trained. The observed and interviewed pupils (10-13 years, male and female) were happy to be part of the “School Animal Health Club”. They learned about animal health (the holistic 5-step-approach) and e.g. protein brick making. They showed excited their competence in a protein brick making event (Picture 16). The mothers were happy about excited pupils and explained, what they have learned from their children about animal husbandry. On the other side pupils and mothers were sad, because the School-Club did not continue after Nov 2018. The curriculum of schools does not cover animal husbandry or practical training in brick making. There is a high interest of teachers, mothers and pupils to continue and scaling-up such initiatives, which MRDP brought to them.

4.2.2 Relevance for external stakeholders

One of the biggest strengths of the project is its strong linkages with a range of government and private sector actors across the value chain. The project plays an important role in bridging the gap between the large scale commercial sector and the small scale livestock farmers, linking them to markets and also promoting the indigenous breed as the future of goat farming in the country and region.

Government agricultural extension staff, Provincial Department of Agriculture and Rural Development, and Municipal officers

Only 3 of 11 districts have a governmental veterinary service (no vets are found, and positions are empty), and the service is getting worst. Experienced staff of the provincial veterinary service mentioned, that “the governmental veterinary service is 30% of the quality compared to the Apartheid time and decreasing”.

⁵ CAHWs are young men or women, who have been nominated by the dip tank group, become trained and competent for simple veterinary service in the dip tank farmers group.

⁶ Grade 9 is more than primary school (grade 6) but less than completed secondary school (Grade 12=Matric).

Because of the governmental deficits in service provision (“No cars, no drugs, no money and too many farmers”, as a governmental veterinary field officer said), agricultural services and support is offered by private business (veterinaries, chemical and feed companies) or by NGOs, like MRDP in Msinga and Nkosi Langalibalele. Farmers, chiefs and other stakeholder trust MRDP work, but not the governmental extension service and private business (“too expensive and/or not available in the poor rural areas”).

Livestock is lacking governmental extension service especially for goats and chicken keeping. There are many cattle dip tanks (157 in the MRDP area), but not for goats. Treatments of goats and chicken are new to the people. If they have to pay for it, they fear that the cost for the service service could be higher than the value of the animal. MRDP has installed 49 goat dip tanks till 2018, and 57 are targeted in total (16 goat dip tanks are in establishment in 2019 and 2020). This is a change in goat keeping in the project area and highly appreciated by the keepers.

Communal Animal Health workers (CAHWs) are seen as option to fill the gap of missing governmental extension and veterinary service for communal small-scale animal holders, and to create some jobs and income opportunities. The problem is the implementation and capacity development of selected CAHWs, because the governmental extension service is not able to do these duties sufficient and sustainable. Since 2014, 110 CAHWs have been trained in MRDP area (264 in the GAP project).

Therefore, joint projects with NGOs like MRDP are welcome by the governmental authorities to strengthen governmental service in less developed areas like Msinga and Nkosi Langalibalele. The Goat Agribusiness Project (GAP; further info sees Appendix 11) is an excellent example, how it can work. Government became part of the activities, and MRDP could scale-up the work into other districts, implemented by the NGO HPSA (supported by EU funds).

Despite GAP has governmental partners (their logos are found everywhere in the field: (Picture 15, Picture 17, Picture 18, Picture 12) these departments are not recognized and appreciated by beneficiaries (farmers, local authorities, Livestock Association, etc.).

Many farmers have never used or seen an extension service, due to many reasons. Improved governmental agricultural extension is necessary, as municipal officers said. Some interviewed farmers and local stakeholders said, that “Government should give all dip tanks to Mdukatshani, because they deliver and government not.” This is a unfair and MRDP has a risky image, if governmental authorities do not like their negative image and strong NGOs anymore. Some countries have already prohibited NGOs to work in their countries (e.g., Russia, another BRICS country).

Private business (markets, middlemen, auctioneers)

Usually, private business is focused on “commercial farming” (comparable to governmental support) and/or import of food.⁷ The communal farming and the high potential for increasing food production is not considered well in the market. Because these communal farmers work with low/no external input – low output systems, private business does not see them as market: not for inputs and not for outputs.

Therefore, there are no traders active in the area, apart from some trades, done by chance. Only some local “spaza shops” and trading stores in Msinga and Nkosi Langalibalele offer farm inputs (drugs, feed, pesticides, farm equipment), but the farmers are not used to paying for services (extension) and have little or no experience in effective and efficient utilisation of innovations.

On the other side, there is an increasing market integration of the subsistence households. Goats, chicken are sold to local buyers, particularly in the increasing towns. Auctions can be a chance to make the marketing easier for the farmers. But there are only cattle auctions in the MRDP region. They are big

⁷ Since 1994, the import of food has increased significantly (Table 5). This is due for the import of goat and sheep as well. The numbers have increased from 0 to 169,517 goats and 316,333 sheep in 2016, but only 6,519 goats and 28,867 sheep have been exported (FAOstat).

and managed by big auctioneers and deliver cull cattle to abattoirs in big cities for mass markets. Comparable goat and chicken markets do not exist. GAP has started to establish mobile “Goat mini markets” in the towns to show the potential of smallholder’s goat (and even chicken) production. The observed “mini market” adjacent to the hypermarket in Tugela Ferry (Picture 18) has shown the interest of people and the market potential.⁸

Such “goat mini markets” are planned and paid by GAP with the support of the local Livestock Association. They appreciate this support and would not have the capacities to carry-out such events without the GAP support. There is a need to strengthen LAs for “mini markets”. It can be done 100% independent from a project like GAP, but it is not seen as an option yet by LAs board members.

Private businesspeople (middleman, auctioneers) are not yet active in goat and chicken marketing in communal areas and with local breeds. They focus on cattle. An interviewed business man mentioned, that he could be interested, but the local breeds do not fulfil their expectations (high performance “Boer goats” are their expectations, because of higher weight and better body confirmation). This is not the opinion of the private “Indigenous Veldt Goats association” (IVG; www.indigenousveldgoats.co.za), established by white goat farmers and active in all parts of South Africa. They see local goats as a opportunity, but target better management: breeding selection, feeding improvements and health management. This approach is conforming with the approach of GAP and an opportunity to stimulate the market for small-scale goat farmers.

There is no sign, or anything mentioned about chicken markets, apart from home-to-home sales by chance. There is a need to make local chicken better marketed, despite the supermarkets offer very cheap chicken from Brazil and EU (Picture 19).

4.3 Outcomes and impacts

The positive and negative changes produced by a project, directly or indirectly. This involves the main outcomes and impacts resulting from the project. The evaluation should be concerned with both intended and unintended outcomes and impacts. Following questions have been considered:

- What real difference has the project made to the beneficiaries in terms of social, economic, political, cultural, and ecological changes, taking into account the gender dimension?
- How many people have been affected?
- In what ways are livestock keepers, and particularly women and youth, benefiting from the project? What else needs to be done to accelerate impact of the project on its beneficiaries?
- What benchmark can be used to assess the viability of scaling up this project?
- Which other factors contributed to the changes that were generated, and to what extent can the changes be attributed to the project activities (plausibility)?
- Has the real chain of causality been consistent with the chain of causality established at the planning stage? If not, what were the differences?

“If women farmers have access to agricultural inputs, their yields can grow by 20-30%, raising total agricultural output in the South by 2,5 to 4%, and reduce food insecurity by 12-17%” (FAO 2016).

Studies have shown that improvements in gender equality reinforce sustainable development (FAO 2016). Policies and programmes that enable women to thrive in agri-food systems are as much about economics as they are about equal rights.

⁸ Sales in one afternoon goats: goats: 29 presented and 27 sold for 26,200 Rand, 7 chicken sold for 410 Rand, CAHWs products: 17 protein blocks for 204 Rand, goat leather bags have been offered but not sold. Information have been given to interested goat and chicken farmer, including training manuals, calendar.

Mdukatshani's work in Msinga is designed to invest in rural livestock development, boost the local economy, and create access to commercial livestock markets. The project's strong focus on women and youth is impacting positively on removing gender-based constraints and its intersections with socio-economic status, age, ethnicity, education, and geographic location. The internal logic of the project's interventions has stimulated inclusive participation at various levels in the livestock value chain:

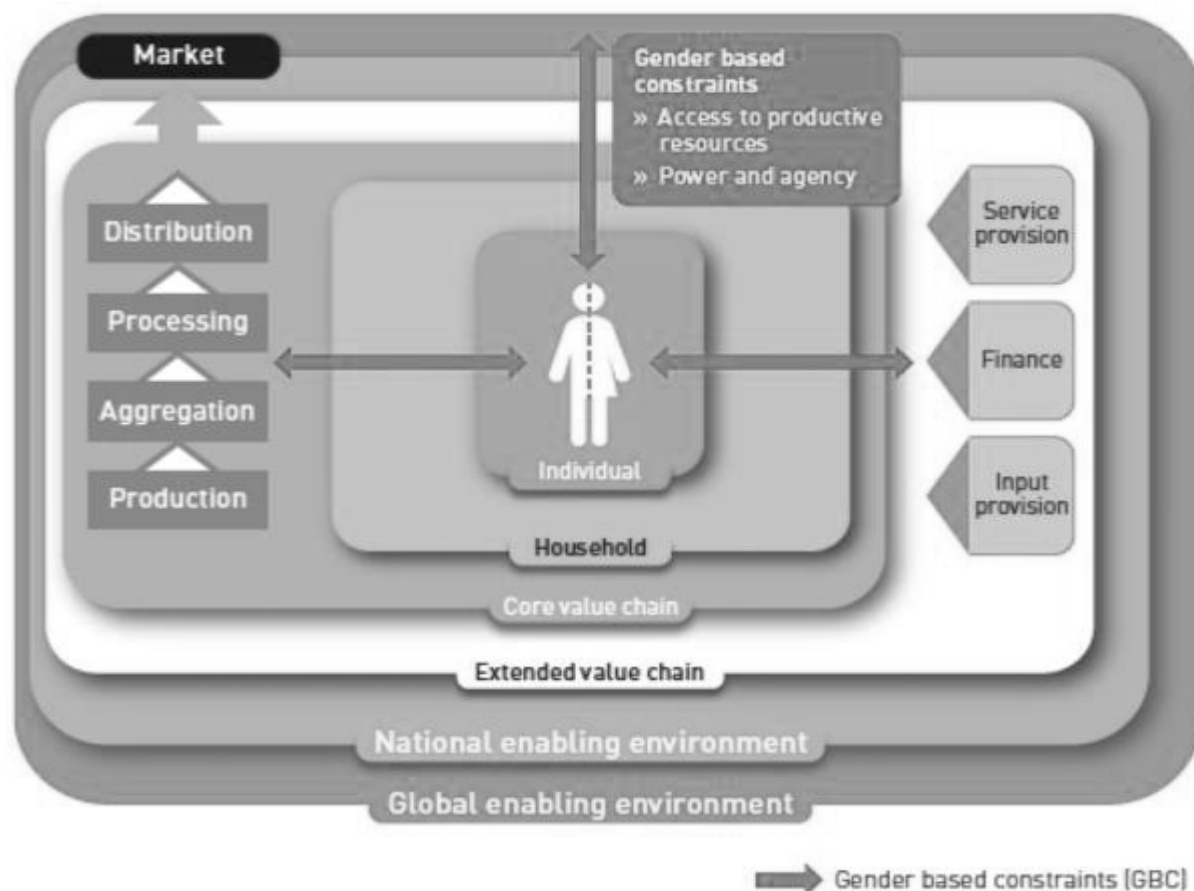


Figure 2: The FAO Gender-Sensitive Value Chain Framework

The MRDP has following gender impact:

- Access to productive resources: goat dip tanks, design for goat kid enclosures, chicken nests and cages from local materials.
- Service provision: animal husbandry services by CAHWs, SETA (government approved training certification) accredited training of women groups, school learners, and CAHWs in animal husbandry, health and disease management, learning materials in isiZulu with visuals on goat keeping, children trained in animal husbandry and making mineral blocks, training in management and finance of livestock associations.
- Finance: access to local and regional markets, income from livestock sales and value adding
- Input provision: affordable access to medicine, animal feed, animal husbandry advice and support
- Power and agency: membership of local women's group, membership of local livestock associations, and through this membership influence at Traditional Administrative Council, women's decision-making power over livestock and income from livestock, livestock associations' capacity to act as a collective and mobilize resources and support.

Mdukatshani staff and CAHWs are well organized and disciplined in keeping records of all activities and attendance. They produce field reports, which inform monthly reports to the Government Department partners. All field records are entered into an impressive database that tracks operations monthly

and in great detail. Unfortunately, the M&E function is not optimized to generate quantitative evidence on demand. A sum-total of project beneficiaries, goat dip tanks, value of sales, mortality rates etc. to illustrate project impact to date was provided for 2014-2017 but not available for 2018-2019.

Some statistics for the period 2014-2017 (MRDP 2017):

- 90% of households in Msinga keep chicken, 70% has goats, and 30% owns cattle. The project's focus in animal husbandry of chicken and goats has boosted people's livelihoods.
- 400 farmers had started to vaccinate their livestock and used improved feed and mineral blocks.
- Goat kid mortality dropped by 55-60% at homesteads with goat enclosures and kid feeding.
- 200 women farmers sold 1400 goats, 40% of a total of 3,500 goats. This would have boosted a household's average monthly income of 1,200 Rand with earnings of 6,300 or 525 Rand per month (at a low estimate of 1,000 Rand per goat and 50 Rand per chicken).
- 80 children in 4 schools and their caregivers had gained knowledge and skills in animal husbandry.
- 120 young female and male CAHWs had come through the programme. Hard lessons were learnt when Government-funded stipends ended in Nov 2016. The programme was redesigned as incentive-based entrepreneurship, and 148 CAHWs were recruited and trained.

"Livestock is everything. You have dignity. It gives you power. Our money is not in the bank, but in the kraal. We can decide what to do. We are widows and our sons can't do anything without our approval. If you get visitors, you can't quickly sell a cow, but you can sell a goat or some chicken!"

These statements by women in Ncunjane (13 May 2019) illustrate how improved management of goats and chicken has elevated their socio-economic status in their households and wider community. Women in Msinga have learnt to vaccinate goats against Heartwater disease and chicken against Newcastle disease, treat goats against ticks in basins at home or at the new goat dip tanks, and build cages and nests from local materials to protect chicks and eggs from predators.

Mr. Mvezelwa Mchunu in Ncunjane had 80 goat kids, of which 40 died (50% mortality). In 2018 he built a shelter for his goat kids and started to feed them with homemade supplements. Now he has 132 goats kids while only 8 died (6%). Last year, Mr. Mfana Mbatha in kwaJeke's 90 goats had 67 kids of which 30 died (45%). He recently built an enclosure for his goat kids. These on-farm experiments are part of GAP's Raising 100 Kids initiative and are successfully contributing to Mdukatshani's aim of halting the high prevalence of goat kid mortality. Each community animal health worker or CAHW (see below) is expected to support at least one farmer in their area with this goat kid management experiment. Farmers can follow step-by-step instructions to build this "supplemental feeding enclosure" in the Indigenous Goat Production handbook (Goat Agribusiness Project 2018:14-16).

"I am hardworking, have a passion for livestock, and respond immediately when a farmer needs me. Since I started, no one has experienced livestock deaths. I am making a difference in my community".

This is the vision articulated by young female and male 'nompilo bempahla' (animal health care worker) or CAHWs after a refresher training in Weenen (14 May 2019). CAHWs render services to farmers to make their livestock more productive. They are elected by people in their area and trained in practical animal husbandry of goats and chicken. The training materials are comprehensive, and practical with clear illustrations (Goat Production Handbook 2015; Indigenous Goat Production Training Modules 2018). After successful completion of training they receive a uniform, vet kit, hammermill, and block maker with starter mix. They are set up to provided support to farmers and Mdukatshani and charge a stipulated fee (Annexure 3 CAHW Contract). Services for farmers include treatment of animals, processing of stover, and energy blocks. Services to Mdukatshani include a census, assistance at the goat dip (a project innovation), monthly sales, and vaccination days. CAHWs are trained in all aspects of animal husbandry, including marketing and value adding such as tanning of goatskins and making

leather products. However, CAHWs largely identify themselves and are seen by farmers as “community vets”.

Mdukatshani is leveraging existing community structures to facilitate inclusion of women and youth in livestock development. They use as entry point the 57 cattle dip tanks, managed by Livestock Associations, and established many years ago by the Department of Agriculture. The dip tanks are the “catchment area” to organize women and youth around livestock. There are two CAHWs for each of dip tank, and women’s groups are formed who meet regularly to be trained and supported in improving goat and chicken husbandry and sales. At an average of 20 members per livestock association in 57 dip tanks, the project would have reached at least 1,140 livestock keeping households, a modest 0,6% of total population or 0,9% of goat owners in Msinga.

As a result of the project, female and male livestock keepers are supplementing maize with more nutritious feed, sourced from what is available around them. This can be a mix of maize stover, beans hay, acacia pods, and/or perhaps Lucerne. Materials are processed using a hammermill operated at a small fee by the local community animal health worker (CAHW). CAHWs also sell nutrition-dense mineral blocks, which they learnt to make from a starter-pack of ingredients, and a block-maker specifically designed and manufactured by the project (see GAP 2018, p 6-7).

“Our kids have been taught the symptoms when a goat is sick, a droopy tail, ticks on the back. They can diagnose and inject, know how to make blocks, and give us instructions how to feed it. My daughter noticed ticks on a goat, lifted its tail and saw it had a wound that got infected. Girls never cared about livestock, now they have a passion. The programme should run until matric. The kids got better with doing their homework. They are motivated to finish school, and even become doctors”.

The wider community benefits from the project in many ways. Mdukatshani developed a animal husbandry programme for learners in Grade 5 and 6. Local spaza shop owners have been trained to run an agrovet service by selling veterinary medicine, animal feed and supplies, as well as the mineral blocks. Local customers can buy goats and chickens at small auctions held regularly in their area (see below).

“Besides pension, livestock brings a lot of money. Goats are best, they can give twice in a year, and it’s easy to find buyers. Chickens are also good. It’s easy to increase production. It’s hard to find buyers for cattle. They make a lot of money but only once in a while, and they cost a lot”.

This statement by women in Ncunjane illustrates that Mdukatshani has raised awareness about the economic value of keeping livestock. Female and male livestock keepers are motivated to look after their goats, so they get a good price, and/or are able to compete at auctions.⁸

Mdukatshani holds these small local mobile auctions throughout the year. CAHWs and staff organize mini-sales by finding some buyers beforehand and notify people in the area. The mobile auctions attract spontaneous buyers of livestock, customers for livestock-related products on sale, and raise awareness among passers-by. *“I just walked past and saw this information stand. I learnt a lot from these animal health workers. I haven’t been serious about my goats, and just keep them for ceremonial slaughter. But now I want to find out more. If it’s beneficial I will join the livestock association, and I want to sell in Pietermaritzburg”*, said Mr Lathe Dlamini at the mini-sale.

Formal auctions are inaccessible to most livestock farmers in Msinga, which are held a few times a year in large towns. Transport costs to take livestock to auction are high, and sellers have to pay an auctioneer’s fee. Mdukatshani collaborates with private sector actors like Indigenous Veld Goats (IVG) to address these constraints and grow investment in the rural economy. IVG is a national network of indigenous goat farmers clubs with close to 300 members. Hilton Sanders founded IVG to boost high quality indigenous goat production. He also buys goats at the mini-sales and sells these to clubs. He uses his influence to transform the sector in general and the Indigenous Goat Breeders Society in particular, which is dominated by White commercial farmers. These auctions are expensive and complicated but an important enabling mechanism to set the prices in farmers minds of what the going price of a certain

size and gender of goat could be. This pricing then helps farmers and speculators negotiate on a level playing field at farm gate sales

4.4 Effectiveness

A measure of the extent to which a project achieves its objectives as laid out in the project contract, i.e. a comparison of the intended outcome with the observed outcome. Following questions have been considered:

- To what extent were the objectives achieved or are likely to be achieved? What information is available with regard to the agreed indicators that will help answer this question? What other information is available with regard to the achievement of the objectives?
- What evidence is generated that show that progress is made against indicators and objectives? What trends are observed?
- What were the major factors influencing the achievement or non-achievement of the objectives?
- Were the initial objectives realistic?
- How well do the organisational set up and processes of MRDP function to contribute to the achievement of the project's objectives?

4.4.1 Objective No. 1: Improved livestock productivity of farmers in Msinga through enhanced livestock health and management.

Indicators:

- 1.1: 60% of women project members are vaccinating and using improved management systems with their chicken flock
- 1.2: Goat kid mortality has been significantly reduced through improved management and winter-feeding process

Findings:

1.1 Chicken: Women did know about chicken diseases and the importance of vaccination. Only few households and woman chicken groups could be assessed. Nevertheless, the impact of vaccination is big and with the MRDP implemented, but not in other areas without MRDP. There were no records and reports from MRDP available to have evidence based information about success of MRDP vaccination, but vaccine purchasing receipts (MRDP audit reports) and the confirmation of women convinced the evaluators about success (Picture 12).

1.2 Goats: Observations while the dipping of goats (Picture 8) at one dip tank showed the high competence and commitment of farmers (women, men and youth together) who did the action professionally. The goats showed good health and did know the procedure of dipping as well. MRDP survey data from 2018 (normal climate) showed following goat figures for 8,044 households in 49 dip tank surveys (number of goats dipped, excel sheets, no report done on surveys): 114,148 goats have been kept, 41,546 kids were born (lambing rate 36%) and only 25,744 survived (57%) and 15,802 died (mortality rate 38%). These production figures are very low in comparison to the potential of goat production (normal is 150% and 10%, resp. under good management conditions).

4.4.2 Objective No. 2: The number of women and youths involved in income-generating livestock and value-adding activities has increased.

Indicators:

- 2.1: 30% of women livestock owners involved in the project have improved productivity with herds and flocks and as a result are generating more income

- 2.2: 50% of Community Animal Health Workers (CAHWs) are generating income through feed, health and management value adding activities

Findings:

2.1 Improved goat and chicken productivity: Especially women have been strengthened socio-economically with improved goat and chicken husbandry. On a mini sales market it could be seen, that local chicken and indigenous goats have a market. If one goat kid or chick does survive, 1,000 and 50 Rand respectively is earned (Picture 18). Even without selling but home consumption, more chicken or goat meat does improve nutrition, particularly in poor households. Again, records and data are available, but no reports (baseline and annual reports and data) have been produced yet.

2.2 CAHWs: In total of all 5 districts of GAP, about 130 (50%) of 264 trained (Picture 7) and installed CAHWs have terminated and left their function as CAHW, in MRDP 42% (50 out of 120 resp.; information from MRDP staff). Many have left because they expected a job and income, as promised. In the GAP contract (2014) was a governmental stipend for one year agreed but not implemented. This was very disappointing for the CAHWs and Mdukatshani (image risk of the NGO and the MRDP project, due to government failure to deliver). Male CAHWs have left to find jobs and income in cities. The remaining CAHWs have not left because they did not find another job yet or were still convinced that a CAHW is a good service for the dip tank groups and homesteads. Particularly female CAHWs were very positive about their function and chance to become support for income generation and education/training in animal health. Even if the move to another homestead after marriage, they can do the work at the new place. Nevertheless, the opportunities to generate income with service (veterinary treatments), handicraft (goat leather bags) and farm inputs (protein bricks, pots/fodder shredding, Picture 6), was not successful for most of the CAHWs. First, they had no training and experience in business skill. Second, they had sociological difficulties to offer service for money in their homesteads (“How can I ask a poor woman in our village for service fee?” was a clear statement of an interviewed CAHW). Evidence based reports for CAHWs activities were not available.

4.4.3 Objective No. 3: Farmers are collaborating with researchers, government and NGOs to find and implement research solutions that are relevant to locally appropriate, sustainable farming systems.

Indicators:

- 3.1 Five areas of research have been identified, researched in the field and made available to a broader audience
- 3.2 Findings from research are being applied by two farmers in 20 dip tanks

Findings:

3.1 Experiments:

- a) One goat on-station experiment: A concentrate feeding with indigenous and improved goat breeds (genotype-environment interaction research) has been observed on Cedara research station (close to Hilton) (Picture 11). The experimental was done by a motivated female MSc student, but the design, routine and result of the experiment was poor (not acceptable under RSA conditions). The results were not convincing/wrong and biased (“2-months kids’ weight: 19 kg”; “Concentrates have no feeding value and indigenous goats have same growth rates than improved breeds”). The senior scientists at the station and MRDP staff did not advice and supervise the MSc student sufficiently and wasted personal efforts and potential impact. A livestock mineral block composition and stability experiment has been done on the Cedara station as well (in the past, not observed).
- b) One goat on-farm experiment: An on-farm goat kid mortality experiment with 100 kids has been observed (Picture 10). Health treatment, improved fodder and kid enclosure in the kraal were convincing. Kids looked healthy and fit, the farm/goat owner was convinced and interested. The

experiment was convincing but overloaded by factors (feeding, drugs, shelter). Record keeping was done by GAP/MRDP staff, not by CAHWs or farmer. Reports were not available.

- c) One goat roaming behaviour study: A female researcher (biologist in animal ethology, Uni KZN) has carried out a field study on goat roaming and grazing/browsing behaviour in Msinga area. She followed three herds of free roaming goats for several days in winter and summer (Picture 2, Picture 3). She has made her PhD with the results, which have been published scientifically and peer-reviewed.
- d) Three chicken feeding and housing experiments: Three feeding and housing experiments have been observed on three homesteads. All were not convincing, not good designed (in context to problems and farmers skills and resources) and complicated, labour intensive and costly carried-out (Picture 13, Picture 14).

3.2 Research transfer:

- For a) The on-station goat experiment was presented live and in classroom to 20 Msinga farmers on the May 28. No-one complained, because they did probably not understand and were not interested (“it was difficult to find farmers in Msinga to attend the training”, as MRDP staff said). All became more interested, as dip tank drugs have been explained by Rauri.
- For b) The on-farm experiment about reduction of kid mortality was interesting for 15 goat farmers have committed to copy the approach of the “kid mortality experiment” but did not started yet. This experiment was convincing, but labour intensive and costly. The interested farmers expect comparable contribution by GAP/MRDP.
- For c) The results of the goat behaviour study were interesting and astonishing for the farmers. They did not know about the roaming of their goats up to 3-5 km from homestead. There was no direct impact towards their management, but they understood, that goats can move long distances, and probably into areas of other goat herds (fodder competition and health risks). The study has not been taken by GAP/MRDP for further knowledge transfer (trainings) to other farmers and areas. Completed and published research is probably considered by MRDP as “end” and not as “start”.
- For d) There was no big interest in the chicken experiments observable on the farms. There was no discussion about the methodologies and results. No-one took records and made reports. Probably, all these chicken experiments will fail, or good results will not be implemented into normal chicken keeping (“too complicated and not enough adapted”, as chicken farmers and CAHWs said).

4.4.4 Objective No. 4: Government and policy makers are informed of challenges and opportunities facing African small-scale livestock farmers, particularly women, in rural areas.

Indicators:

- 4.1 Two best practice or lessons learned documents per year are produced, distributed and made available to peer organisations, farmers and government
- 4.2 20 policy makers have been informed of challenges and opportunities facing African small-scale farmers

Findings:

4.1 Documents: GAP/MRDP is doing good work on the ground, is competent and successful. There are good training manuals and calendars for this work that include best practices shared on two different sizes of goat kid enclosures, goat dip tanks and design, stover processing using local resources such as acacia pods, protein blocks, the CAHW model, the goat sale models (auctions and mini sales) and rural agrivet shops (Table 6). Although most progress reports include statistics, a comprehensive report that tracks changes against the baseline statistics is lacking. Promotion activities like publications need after a while (5 years of the project) evidence based messages (e.g., citation of report with results from studies and surveys).

4.2 Policy maker: Rauri Alcock (MRDP) and Marisia Geraci (HPSA) are very active and good in personal promotion of MRDP and GAP. They were successful, as the national RSA DLA and the provincial KNZ DARD joined the GAP. It is not taken serious enough, that policy maker and funders expect after a while evidence-based reports with good results (Table 7).

4.4.5 Objective No. 5: Mdukatshani follows Basic Conditions of Employment Act.

Indicators:

- 5.1 Job descriptions and reporting procedures are written up and signed by each staff member
- 5.2 MRDP has an operational policy manual that is reviewed by management and board once every two years and made available to staff

Findings:

There is a comprehensive HR manual, job descriptions, and staff evaluations. There are project proposals, and regular staff quality reporting, but there is no organogram, organizational nor operational policy manual and strategy. Job descriptions don't follow the job profile format as in the HR manual, but are descriptions of tasks. No minutes of staff meetings or management meetings were provided. Formal and transparent up- and down-stream leadership feed-back systems and personal qualification standards are not defined. There is no staff committee, who can discuss controversial issues with the managers.

4.5 Efficiency

4.5.1 What evidence is there to indicate that the project was implemented with due efficiency under the given circumstances? Did the project act in an economical and cost-conscious way?

There is no doubt that MRDP is doing a good work with the project funds from Misereor. The total budget calculation for the two periods from 2014-2020 were 1,014,000 Euro, with 771,000 Euro contribution from Misereor (76%).⁹ Governmental partners and local authorities have contributed the remaining 24% (243,000 Euro). There is a joint work with HPSA in the Goat Agribusiness Project (GAP), who received an EU fund of 800,000 Euro (2017-2021) for the work in three districts, where GAP is working, but not MRDP (Appendix 11). This GAP is seen as good synergy and scaling up the MRDP idea and impact with additional partners and funds. Nevertheless, there was a slight in-transparency, because no joint reports of GAP, which includes MRDP, HPSA and governmental contributions, were available.

As observed, the office, the transport and the infrastructure of the project is low cost, compared to governmental and consultant actions. The share of the staff salaries is high in the MRDP (55% or 561,900 Euro; Misereor 2014 and 2017) and exclusively covered by Misereor funds.¹⁰ 9 staff members are paid by Misereor and their salaries are ok/low, in comparison with salaries of comparable positions in RSA. The evaluators are sure, that it is senseful to have a big share of salaries in MRDP (Misereor funds), because this does enable Mdukatshani for the excellent work in the field (see effectiveness): the capacities development of beneficiaries is focusing on investing in knowledge, skills and attitude, what needs

⁹ MRDP: 1.8.2014 – 30.10.2017: 497,000 Euro total budget, with a contribution of 394,000 Euro (79%) from Misereor (Misereor project approval 150-003-1123 ZG from 28-07-2014) and 1.11.2017 – 31.7.2020: 527,000 Euro total budget with 375,000 Euro (71%) from Misereor (Misereor project approval 150-003-1135 ZG from 08-11-2017).

¹⁰ The financial contribution of the governmental partner KZN DARD (125,000 Euro) and local authorities (27,000 Euro) for MRDP could not be confirmed, due to missing documents. It was not clear, if the Misereor fund are the only real financial resource for MRDP (and EU for GAP), because the government did not deliver (e.g., not paid CAHWs stipends). That would mean, that 89% of the Misereor fund is spent for salaries.

committed and qualified staff, rather than farm inputs, material and infrastructure. Later could be governmental duties or private business, and possible in the case of a wealthy South Africa.

4.5.2 What are the parameters on which this assessment is based? Are any benchmarks for these parameters available from other projects or institutions?

The calculations are vague, but possible (Table 3). A comparison with other projects is not possible, because figures are not available, but in the experience of the evaluators in other projects in other countries, other implementation partners (government, consultants, NGOs) the cost per output and outcome are low.

Table 3: MRDP and Misereor project cost parameter

		MRDP total budget		Misereor contribution	
		2014-2020	per year	2014-2020	per year
		1,014,000 €	144,857 €	771,000 €	110,143 €
Total area Msinga and Nkosi L. (ha) (1)	250,000	4.06 €	0.58 €	3.08 €	0.44 €
Grazing / browsing area (80% total area) (ha) (2)	200,000	5.07 €	0.72 €	3.86 €	0.55 €
Population in Msinga and Nkosi L. (people) (5)	177,000	5.73 €	0.82 €	4.36 €	0.62 €
Households (no.) (5)	37,724	27 €	3.84 €	20 €	2.92 €
Households with livestock (no.) (1)	20,000	51 €	7.24 €	39 €	5.51 €
Households with goats (no.) (1)	13,000	78 €	11,14 €	59 €	8,47 €
MRDP intervened dip tanks (no.) (3)	49	20,694 €	2,956 €	15,735 €	2,248 €
MRDP surveyed households (no.) (3)	8,044	126 €	18 €	96 €	14 €
MRDP touched goats' numbers (4)	114,148	8.88 €	1.27 €	6.75 €	0.96 €
MRDP touched chicken (women farmers) (3)	117,906	8.60 €	1.23 €	6.54 €	0.93 €

Source: (1) GAP 2015, (2) own est., (3) MRDP survey 2018, (4) dip tank figures 2018, (5) SAstat Census 2011/2016 (wazimap.co.za)

An assessment of total cost and benefit of this project, and the viability of scaling up should consider:

- All funding contributions (i.e. Misereor, and ad hoc funds from the National Department of Rural Development, and KwaZulu-Natal Department of Agriculture)
- Total income gained by livestock keeping households and CAHWs from services rendered and received
- Valuation of total cost of prior: livestock losses, unemployment, non-productive livestock
- Valuation of total cost of the current lack of Government support in providing animal health and veterinary services to Msinga

4.5.3 How well is the organisation able to perform? Possible areas to consider may include e.g. management and administration systems, communication structures, an appropriate PME system, regional and thematic breadth or concentration.

The project is running smoothly and successful, because the project managers are able to create good and motivating working atmosphere (pioneer/activist style). The MRDP staff is happy with their job and work. They are highly committed and successful in the duties on the ground. Nevertheless, this is also a risk for sustainability, if a project manager would step-out or the good and motivating atmosphere would be disturbed, the organisation needs more formal and reliable structures.

As already mentioned in previous text, there is a gap in proper and evidence-based reporting. The overall impression was, that MRDP has too much initiated on the ground and struggled in management and evidence-based quality and impact control (not enough focused, no clear preferences, no cut-offs, no clear delegation, lacking important reporting, M&E deficits). Their salary could be higher to reduce the step-out risks of well trained, experienced and demanded staff. Job-lost-fear, if Misereor would terminate support, was obvious in staff discussion. Exit strategies are not developed without fearing staff (alternative funds, topics, areas). The communication structures (e.g., WhatsApp-groups are not always good, clear feedback systems staff-management missing, a lot of "management by chance" and

“management by fire brigade”) and data / file management have deficits and can be improved (risk of “graveyard of files and data”, persons from outside cannot get a clear evidence, file- and report-based overview, all is in the head of the project managers).

4.5.4 What is the relation between the observed effects and the resources used?

There is no doubt that the project is running on low costs with high output and outcome, because managers and staff are highly eager, motivated and qualified. This is not always a good example, if the story would be copied and pasted to other locations without a comparable NGO (see other three GAP districts, which are Mdukatshani-free).

4.6 Sustainability

Sustainability is concerned with measuring whether the benefits of a project are likely to continue after funding has been withdrawn. Benefits need to be environmentally as well as economically, technologically and socially sustainable. Following questions have been used:

- To what extent will the services and benefits of the project continue after funding from Misereor ends?
- What were the major factors that influenced the achievement or non-achievement of sustainability of the project?

“Mdukatshani beefs up everything we have in the community! We have learnt a lot and livestock numbers are increasing, but if Mdukatshani would leave it would be very painful! Livestock still need to be diagnosed and treated against diseases. We won't have auctions”, said livestock associations and women groups in unison.

Mdukatshani's long history in Msinga and their social connectedness with the people have given the project great credibility. This enables them to continue to build their reputation as reliable partner in development of the area. They are piloting a promising service delivery model for livestock extension and research, working within existing local structures, collaborating with animal health technicians, and adding value through providing services where these are lacking. The project is designed with sustainability in mind through building capacity, infrastructure, market linkages, and lobbying for dedicated Government budgets. All these need to perform in tandem to accelerate the development of viable small stock value chains.

The weak link, as stated before, are the Government partners. The deliverables of the project are not integrated in the formal work plans of the animal technicians and relies on the person's drive. One animal technician interviewed was very enthusiastic and committed, because he recognized the added value of the project and the wide reach far beyond the Department's limited staff capacity. During the period of evaluation, Mdukatshani and HPSA had meetings with the Departments to obtain a firm commitment from them to meet their financial obligations to the project.

Not all CAHWs are created equal. Despite the high turnover rate, most CAHWs enjoy their work in supporting farmers, and are earning some cash. This income helps their households, but it is irregular and too low to provide for the family and top up supplies. They are often forced to choose between one or the other. Two CAHWs have done so well that Mdukatshani has taken them on as staff interns. This will further grow their competence and boost confidence for a brighter future. The high turnover of CAHWs cannot be explained by a single factor. Experiences in other job-creation and incentivized change initiatives suggest that a number of push and pull factors are at play that influence retention rates among youth. The new cohort of CAHWs also suggested that the high turnover perhaps was because the first group did not have the passion for livestock.

4.7 Additional specific questions

Question 1: How to evaluate the animal health approach of the project – both in terms of effectiveness as well as sustainability?

Answer 1: The effectiveness and sustainability of MRDP were assessed in chapter 4.4 and 4.6, but the evaluation was done as best as possible, but not to a level, what would allow a real assessment of the outcomes. The evaluation team was not able to get sufficient and evident information about the impact of MRDP: The baseline was not available and no annual reports, to check the data randomly. The questionnaires, which are produced and used by the GAP project, contain too many questions and no focused-on objectives and indicators. There was no pre-test done. The partners of GAP, including MRDP have only very little experience in good survey preparation, data collection, assessing and reporting. In the long run, an evidence-based report would be requested and could answer even difficult and critical questions.

Question 2: How is the ecological impact of the project, if the targets are achieved and scaled-up throughout the region (e.g. degradation and desertification, agricultural and natural biodiversity, climate change and mitigation, erosion and water availability)?

Answer 2: Sustainability is more than just the future of the project after the exit. In the objectives it is understood as social and economic sustainability, but not in context of ecology (see BMZ 2009, Stockmann 2000). Definitely, there is an impact on ecology with increasing number of livestock (Fuglie et al. 2012): positive and negative. The positive impact is the control of thorny shrubs (*Acacia* spp.) and others (shrub encroachment due to under-utilisation; Ludwig et al. 2018). Negative impacts are the grass/herb vegetation, due to over-utilisation. It is a need to find sustainable stock densities and stocking rates in the areas (e.g., randomly fenced enclosures of 400 m² / 100 ha without livestock access, to see impact “with” and “without” on vegetation; regular photo documentation is sufficient). The numbers of goats are still low and would allow even more, but not cattle, who do only graze and cannot reach the thorny *Acacia* fodder. The roughage from trees would allow double numbers of goats, but fodder collection by animal holders above the bush horizon of 2 m would be necessary. Particularly in dry winter season and droughts, the grass/herbs vegetation cover is degraded (soils without vegetation cover). Degraded vegetation has not only a negative impact on biodiversity (flora, fauna) but also on soil fertility (erosion) and water balance (higher evaporation). Additionally, the climate impact of more herbivores is increasing through more methane emissions (Foley et al. 2005)). Increasing number of livestock needs a better market integration, to sell the livestock and not only increasing stock (Steinfeld et al. 2006). This would overcome some of the negative ecological impacts.

Question 3: How much research and extension is necessary to develop sustainable and adapted development of the livestock activities?

Answer 3: Without any doubt, extension is necessary and well done in the example of MRDP/GAP. Nevertheless, related research and transfer of information needs more than knowledge in good innovations, but also in research methodology, collection and analysis of data and last but not least, how to disseminate the results. MRDP and GAP lacking in research design, data collection and analysis as well as supervision and mentoring of researchers/students, to keep them close to the project MRDP and the problems and needed solutions on the ground (the reality of the farmers). There is a gap of research and dissemination knowledge in animal husbandry (holistic approach). The CAHWs will face the risk to become just local veterinaries, with drugs for treatment, but not animal health workers in the 5-step-approach of MRDP. In research and extension is more action and competence (coaching, mentoring) needed in farm economics, market surveys, socio-empirical studies, good governance and ecology impact. The MRDP/GAP staff and CAHWs need much more capacity development in didactic, pedagogic and at least personal skills (business development).

Question 4: How are the livestock activities integrated into the household and farm activities?

Are there better alternatives than livestock for income and livelihood?

Answer 4: There is not enough critical attention about the work done, and to look and think “out-of-the-box”. Approaches of “New Farming Systems Research and Development” (Rahmann and Homann 2012) or “Organic Farming” tricks and techniques for small-scale farming in Africa (www.organic-

africa.net) can help to understand and assess the farming systems much better (and less bias by Mdukatshani history), respectively to give donators and evaluators a more easy understanding). Not all people in Msinga and Nkosi Langalibalele are willing or eager to become better farmers and livestock keepers. Particularly the youth have also other ideas about a better live. There is a need to have a better understanding of the impact of livestock into the local, national and international dimension, as well as activities out of livestock (economic profitable cannabis – Dacha – production across the Tugela river, off-area jobs). The future planning of youth has to be considered more open, and not with only the CAHWs option.

Question 5: How has the processing and marketing of livestock products changed?

Answer 5: There was no big change observable in processing and marketing of livestock. The mini markets with goats and chicken are just started, and not impacting the market integration of smallholders significant. The Indigenous Velt Goats association has shown high potential of goat markets in the area, but the approach needs to be shifted towards quality in husbandry. MRDP has not given other auctioneers like IVG the chance to make money out of the goat values in the area (ideological differences). The government wants more Namibian goats for breeding in KwaZulu Natal (GAP 2014), MRDP not. It is not clear how these different attitudes can compromise.

Question 6: How do comparable African small-scale farmers, who are not part of the project (no support), perceive the development of their own and the project supported farmers in the last years?

Answer 6: There was only little time to speak with “non-project farmers”. But the few cases showed, that some were envious about the support of the “MRDP/GAP farmers/dip tanks”. Cattle owners would like to have the same support like for goat. Youth had no clear understanding of MRDP activities and outcomes. There is a need to have more attention to the “world outside of MRDP”, to be sensible for image and hinderances of the MRDP.

5 Conclusions and lessons learnt

5.1 Conclusion relevance

The support of animal husbandry (health, feeding, housing, marketing) is important for the target groups and the focus on chicken for women and goat keeping for livelihood of families (“fast money”) as “no/low external input – low output farming systems” is most appropriate. Women farmers and youth (CAHWs) are strengthened. The main bottlenecks that the project addresses are a) animal health (addressed via CAHWs) and b) market access (addressed via existing and new auctions at local level.) and c) interventions across the value chain. The activities and outputs are consistent with the project objectives and development goals. As seen in the GAP project (jointly initiated with Mdukatshani), key role players have adapted the philosophy and modus operandi promoted by the project. Because Mdukatshani is highly respected and been active in Msinga and Nkosi Langalibalele for many decades, the farmers and local stakeholders place high value on the project

5.2 Conclusion outcome and impacts

- The project should do a detailed assessment of women empowerment and shifting gender power relations, using the Women Empowerment Livestock Index (ILRI 2018).
- Mdukatshani should clarify whether an activity is a solution to address a specific need (e.g. chicken nests or feeding of chicks) or an experiment to test a possible solution (e.g. different type of feeds, goat enclosure).
- Capacity strengthening of staff, CAHWs, and farmers (as well as University researchers and Government staff) in adopting a rigorous protocol for on-farm experiments, using a participatory methodology such as farmer-led innovation by PROLINNOVA (www.prolinnova.org/africa).
- The project should assess the viability of scaling up this project. To strengthen their argument, we recommend using the Social Return On Investment framework and methodology (SROI 2012; see Figure 8).

5.3 Conclusion effectiveness

The GAP/MRDP is efficient in animal production and productivity, especially chicken and goat farmers and youth (CAHWs) are strengthened. It became obvious in the evaluation that there are enormous data collected by GAP/MRDP staff and CAHWs, but not assessed and reported in context to the objectives and indicators. Farmer experimentation and innovation is integral in the project activities. Farmers adopt those innovations that make sense to them. Not all interventions are designed as experiments with a clear research question in mind following scientific protocol. Successful innovations have been incorporated into up to date training materials and disseminated.

5.4 Conclusion efficiency

MRDP is implementing efficient and cost-conscious under the given circumstances. The training of CAHWs, the trainings of women and youth with focus on livestock is efficient and MRDP does act economical and cost-conscious, as observation and financial audits showed.

5.5 Conclusion sustainability

“We have learnt a lot and livestock numbers are increasing, but if Mdukatshani would leave it would be very painful! Livestock still need to be diagnosed and treated against diseases”, said women groups in unison. The project presents a viable research and extension model which is scalable. Mdukatshani long history in Msinga and social connectedness with the people has given the project great credibility and enables them to continue their reputation as a reliable partner in the area. The weak link in the value chain are the two government departments who have been inconsistent and fallen short in meeting their financial obligations as outlined in the GAP contract. During the period of the evaluation, Mdukatshani and HPSA had meetings to obtain a firm commitment from both departments to meet their financial obligations. Without the support of the government, the project sustainability remains jeopardised the viability of this research and extension model can't be fully demonstrated.

5.6 Lessons learnt

The **answer for the overall question**, to what extent the intervention is appropriate and effective in solving the main problems of the rural population in Msinga as identified by MRDP became obvious in the evaluation: The impact of apartheid still affects geography, governance and general mindsets of communities interviewed. There is still a lot to do to improve the self-confidence, livelihood and the future hopes/wishes of the people in Msinga and Nkosi Langalibalele, especially women and youth. It was also obvious, that **Mdukatshani/MRDP is doing a good job** and is working on mentioned issues. The funds from Misereor were necessary to enable MRDP to do the good work.

The **image of farming/livestock** was expressed by people **contradictory**: on the one side the deep culture and status for patriarchs/families, and on the other side it is perceived as old fashioned, poor in economic results, and a lot of dirty work. The image of farming, particularly for communal areas, needs to be changed or to find a way out of subsistence farming into a commercial based farming system. Times are changing fast and with urbanisation, education and exposure to a larger world, youth may have other wishes for their future than the farming and livestock systems they grew up with.

6 Recommendations, prioritised and addressed to specific role players

- MRDP will need at least another three years. In this period, the partners together develop a viable research and extension model and find ways to integrate the Department of Agriculture's animal husbandry and veterinary services better into the work and to receive higher attention and appreciation by the livestock keepers. The third phase should include an exit strategy from individual communities that are currently only served by Mdukatshani and of the current project activities.

- In the next years the public (governmental service) and private sector (business, associations, farmer) must be strengthened to take over the well implemented ideas of MRDP, and to scale them up into other regions (example GAP).
- Rename GAP. For example it could be called Goat Agribusiness Partnership (instead of Project) to emphasize that GAP is not Mdukatshani or HPSA alone, but a partnership with Government (and private sector). This should also be reflected in its full project title and renamed as something like “Strengthening government services in promoting smallholder livestock agribusiness”.
The change in name will hopefully be complemented with actual buy-in from the Government Departments and securing their annual financial contributions.
- Different payment and incentive models should be explored to make the CAHW model viable and stable. Rather than paying a fixed salary, the project could explore a mixed mode of basic income with payment for services to farmers and/or the project, and performance incentives.
- Invest in a coherent research agenda and strategy including farmer led innovation.
- Ideas generated at the staff/Board workshop should be explored further how CAHWs can deliver top service and the range of services they could earn money with (Annexure 2). Lessons should be drawn from other sectors, such as community health workers, initiatives funded through the Community Public Works, and Expanded Public Works Programmes, and other NGO programmes, also outside South Africa.
- Mdukatshani should invest in organizational development to manage the transition from life stage 3 pioneering to a professional organization (Annexure 3). This work should focus on strengthen the organizational capacities identified as weak at the staff/Board workshop. Organizational priorities include succession planning, sound governance and decision-making, developing a culture of professionalism, transparent financial management, and consistent high-quality reporting and M&E.
- Optimise the M&E function to generate quantitative and qualitative evidence on demand and produce an annual status report on livestock-based livelihoods.

Practical suggestions:

- Identify most transferable, effective and efficient project success stories and proved for scaling-up (e.g., goat dip tanks, chicken nests). (objective 1)
- Improve data management (e.g., M&E work, record and file keeping, document and data archives, data privacy protection and utilization standards). Focus M&E on project objectives/indicators. (2)
- Formalize and strengthen important internal structures (internal audits, procedures, strategy work, HR, communication). (4)
- Increase fundraising activities: reduce dependency from one/few donators from abroad, search for support in South Africa (private, business, public). (5)
- Make governmental partners also “owners” of the project and make them more recognized. (5)
- Give more attention towards capacity development for staff and partners (CAHWs, scientists, students, governmental and traditional institutions). (3, 4)
- Integrate and strengthening business in actions (from aid towards own income). (5)
- Elicit feedback from the first cohort of CAHWs to see where they are now and how they have benefited. The rigour in which Mdukatshani has trained and mentored CAHWs will certainly have opened doors.

7 Appendixes

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Relevant websites (visited in June 2019):

- Project partner Mdukatshani: www.mdukatshani.com
- Census data KwaZulu Natal, Nkosi Langalibalele and Msinga: <https://wazimap.co.za>
- Statistical data agriculture from Food and Agriculture Organisation (FAO): <http://www.fao.org/fao-stat/en/#data>
- Statistics about South Africa, StatsSA: <http://www.statssa.gov.za>
- Human Development Report 2018: <http://hdr.undp.org/en/2018-update>
- Department of Rural Development and Land Reform: <http://www.dla.gov.za>
- Goat Agribusiness Project (GAP), a partner of Mdukatshani: www.gapkzn.co.za
- Heifers Project South Africa (HPSA) an NGO and close partnership via GAP: www.hpsa.org.za
- Indigenous Velt Goats association: <https://www.indigenousveldgoats.co.za>
- German Ministry of Economic Cooperation and Development (BMZ): http://www.bmz.de/en/countries_regions/subsahara/suedafrika/index.jsp
- Misereor: <https://www.misereor.de>
- PROLINNOVA: www.prolinnova.net/africa

Appendix 2: Some relevant maps and statistics

Project area: In the Apartheid time (till 1994) Msinga was part of the homeland KwaZulu and Nkosi Langalibalele part of the “white area” (Natal) and. Till today, Msinga is far behind the wealth and development of Natal (e.g. Nkosi Langalibalele municipality) and the average figures of South Africa (2019: 14,000 US-Dollar GPD_{ppp} per capita; G20 member). Population of South Africa and also in Kwa-Zulu Natal will grow in the future, despite not as much as in other African countries (Rahmann et al. 2019), but up to a level of 100 inhabitants/km² is expected (UN 2017). Rural migration into cities is becoming an important issue for policy already now (Hoornweg and Pope 2017).

Table 4: Population: density, income and employment 2016

	Population	Surface (km ²)	Density (people/km ²)	Income/ person (Rand)	Employment
South Africa	55,653,654	1,229,341	45	30,000	39%
Kwazulu Natal province	11,065,240	94,451	117	30,000	31%
Nkosi Langalibalele	215,183	3,403	63	30,000	21%
Msinga	184,494	2,378	78	15,000	10%

Source: SA Community Survey 2016 (wazimap.co.za; www.statssa.gov.za)

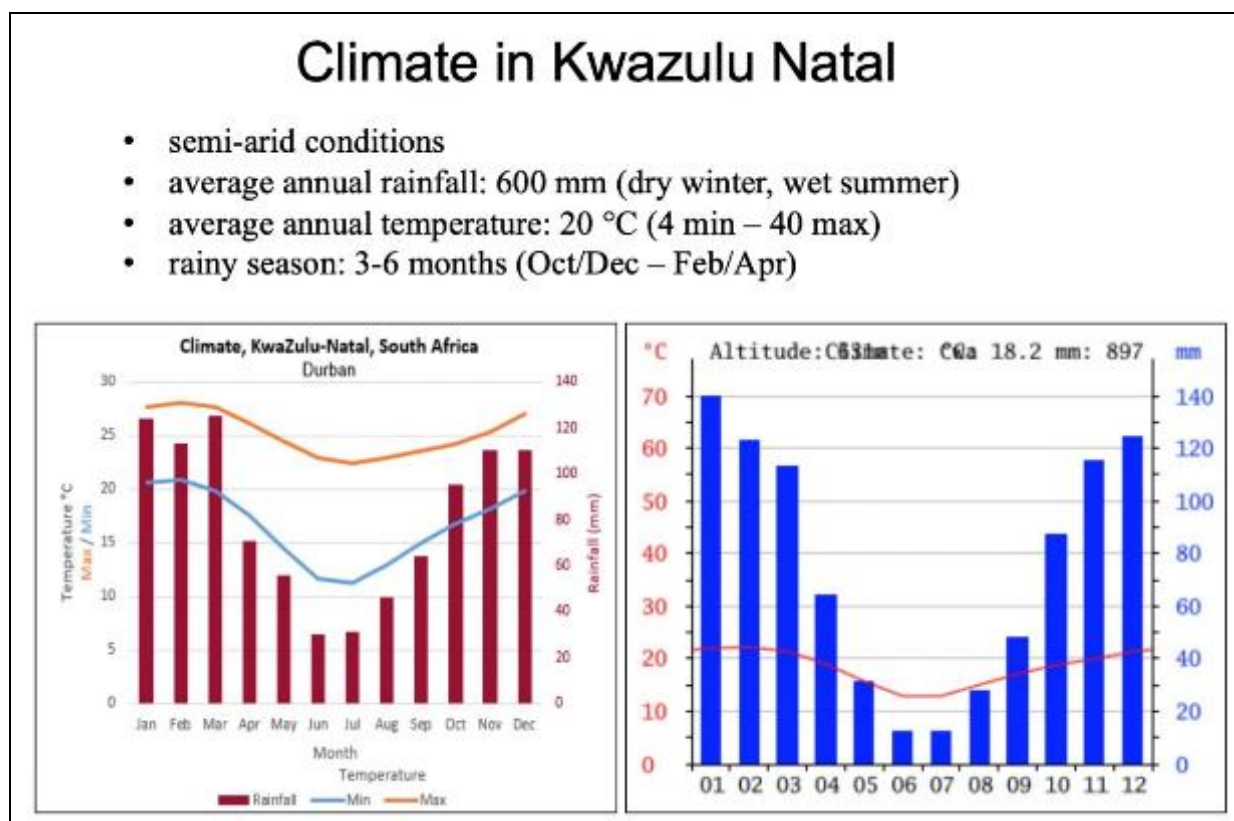


Figure 3: Climate in Kwazulu Natal

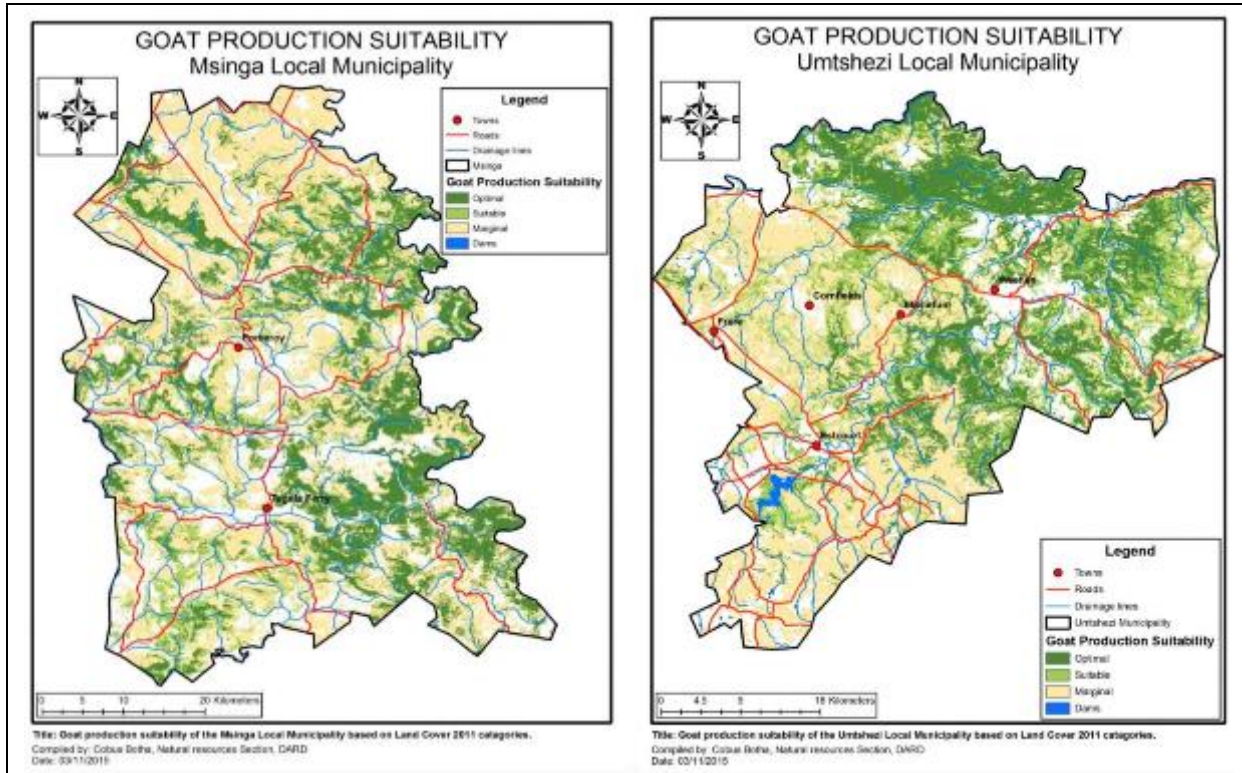


Figure 4: Goat production suitability in Msinga and Nkosi Langalibalele municipalities 2015

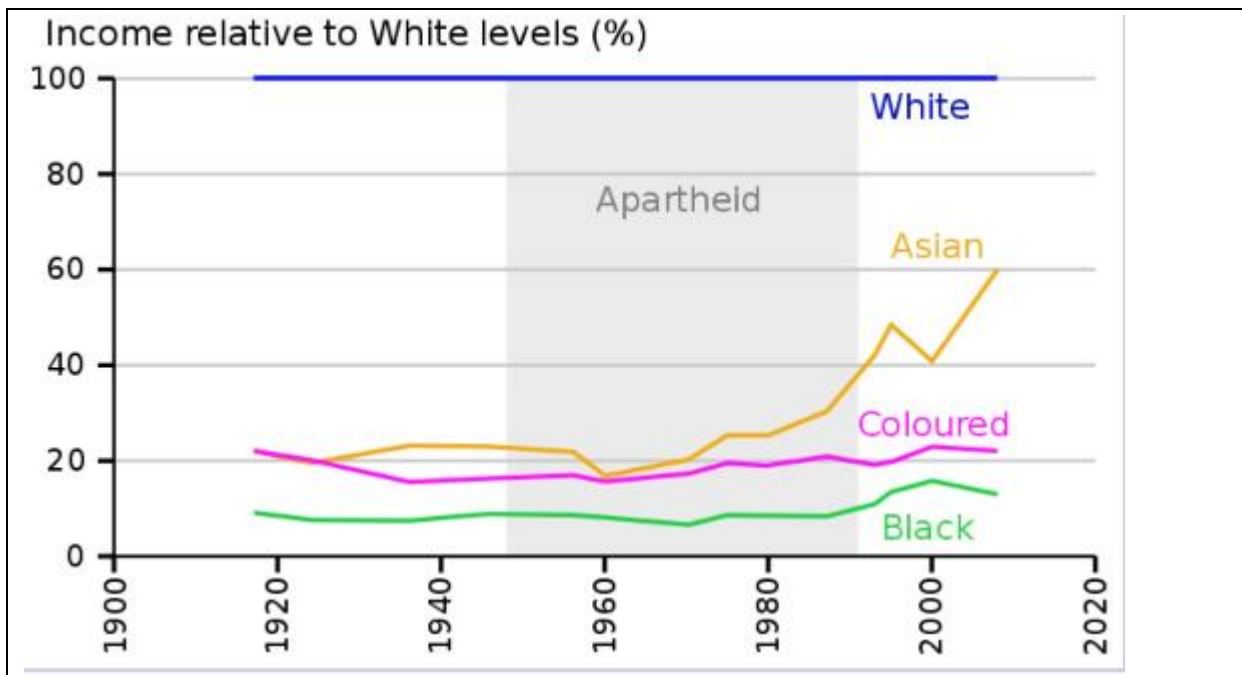


Figure 5: Annual per capita personal income by race group in South Africa relative to white levels (SA statistics)

Appendix 3: Short note on agriculture in South Africa

South Africa is a country of well-developed and high productive agriculture, but has two faces: the commercial and the communal farming. Only 10% of the surface is used for crop farming, mainly done by commercial farming (high external input – high output), but 70% is semi-arid *thornveld*¹¹ and used for extensive browsing, like in Msinga and Nkosi Langalibalele, done in a traditional and communal farming approach (low external input – low output). This ‘dual economy’, legal pluralism in governance, and geo-spatial inequality, created under colonial and apartheid-rule, have not been adequately addressed nor resolved by the democratic Government. Contradicting post-1994 policies, influenced and constrained by global economic forces, have increased the already high levels of inequality, and widening gaps between rich and poor (Oxfam International 2013), urban-rural, and formal-informal sectors. Accelerated processes of population growth, urbanization, agricultural expansion, urban migration, wage labour and monetization of the rural economy, further impact on the potential of rural livestock keeping as viable livelihood strategy. Customary rights to land and livestock are not static. For example, a woman’s recognized rights shift and increase as her position in the household and community changes from young, unmarried daughter to married wife and widow. Urban migration by men and the impact of HIV/AIDS have resulted in an increase in female-headed and child-headed households. In Msinga, customary law have adapted to these new realities by traditional authorities recognizing widows as head of household, and allocating land to unmarried women for housing and agriculture (Alcock et al 2004; Cousins 2011). Livestock are not merely an economic asset to be managed. In pastoralist societies, livestock connect people and enhance social cohesion through the many practical, socio-cultural and spiritual functions they fulfil. Traditional Zulu culture is a livestock-centred culture: livestock are an intrinsic part of Zulu identity and rural way of life, even to those who don’t keep livestock. Members of a household exercise different rights and responsibilities over livestock depending on gender, age, and social status (Salomon 2012). Livestock generate multiple goods and services that are of local, national, and global value. Such goods include meat, dairy products, and hides for subsistence and export, as well as agricultural inputs, such as manure, and animal traction, and less tangible outputs, such as employment and expertise. In South Africa, rural livestock keeping and particularly the goat trade is a multi-million Rand industry (Alcock 2015). Most rural activities and transactions, however, take place in the informal sector. They are not included in national economic statistics, nor do they receive the level of Government services and private sector support that large-scale commercial livestock farming enjoys.

Table 5: Agricultural import and export values and quantities 1990 compared to 2016

		US\$ 1990 (mio)	US\$ 2016 (mio)	diff.	tonnes 1990	tonnes 2016	diff.
Agricultural import		926	6,108	660%			
Agricultural export		1,798	8,091	450%			
therefore:							
Cereals	import	234	1,561	667%			
	export	294	831	283%			
Food and Animals	import	589	4,318	733%			
	export	1,267	6,274	495%			
Meat sheep fresh	import	0.62	19.39	3,153%			
	export	0.13	3.51	2,656%			
Milk equivalent.	import	11	121	1,055%			
	export	33	189	574%			
Ovine meat	import	0.62	19.39	3,153%	942	8,766	931%
	export	0.13	3.51	2,656%	65	964	1,483%
Poultry meat	import	17	350	2,021%	20,148	510,341	2,533%
	export	4	92	2,317%	2,014	76,585	3,803%
Meat	import	74	485	653%	55,645	570,033	1,024%
	export	21	328	1,533%	8,209	160,402	1,954%

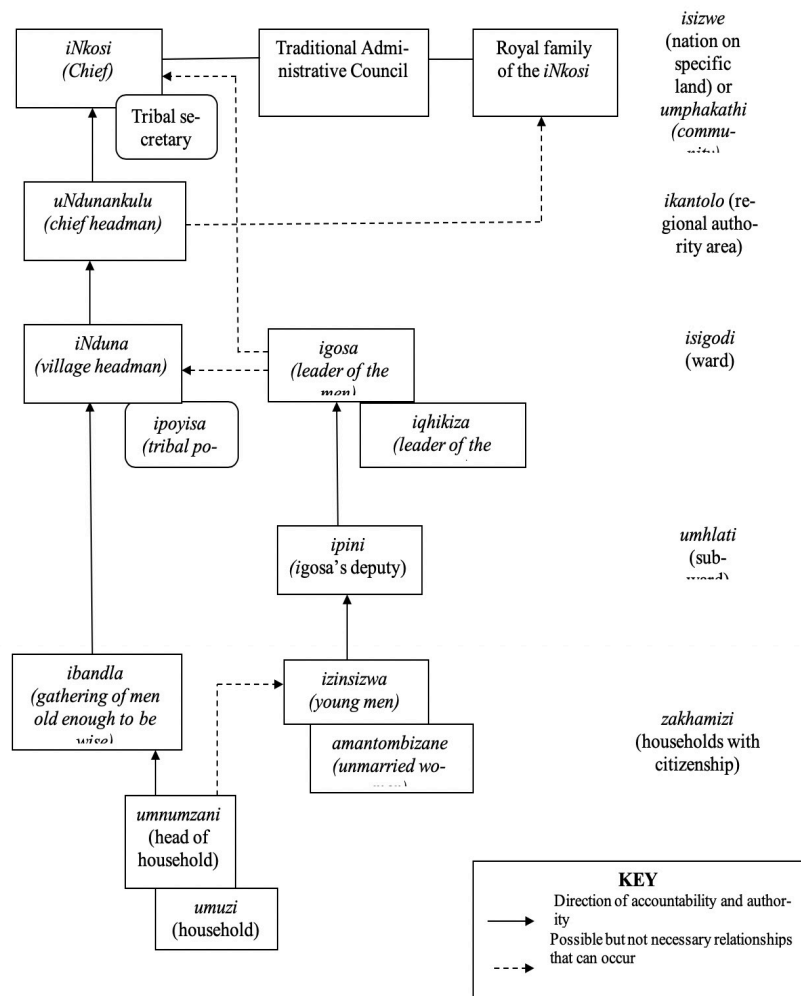
Source: FAOstat (visited June 2019)

¹¹ The typical natural vegetation in KwaZulu is called *Thornveld* and consisting of thorny acacias and aloes. Tall perennial grasses and flowering herbs occupy most of the open ground, often degraded near homes if not degraded, over-utilized (end of the dry season or droughts) or other reasons.

Appendix 4: The traditional governance structure in KwaZulu-Natal

Figure 1 shows the traditional governance structure in KwaZulu-Natal. The relationships within the structure are not strictly hierarchical. Each level of authority is accompanied by specific responsibilities over a geographically defined space. The iNkosi (Chief) and the Traditional Administrative Council are the highest decision-making body with jurisdiction over the nation (isizwe) and the final arbiter on a wide range of issues. A tribal secretary, paid by the Government, assists the iNkosi and council. The nation comprises different izigodi (wards). The uNdunankulu assists the Inkosi and mediates in disputes between the iziNduna and the people in the wards. The iNduna administers land issues, assisted by a functionary (ipoyisa), as well as the igosa and iqhikiza, who regulate the behaviour of men and women, particularly at cultural ceremonies. The ipini regulates the behaviour of young men and women in a sub-ward. The ibandla is a meeting of men who come together to discuss an issue of common concern or to receive information from the iNkosi through the uNdunankulu or iNduna. The smallest spatial unit is the umuzi, a household or homestead. The umuzi holds citizenship, not an individual, and is represented by the head of household who attends meetings of the ibandla or igosa. The composition of the Traditional Administrative Council can vary per area, and generally include members of the royal family, respected men, chief iziNduna, and iziNduna (village head men). In some areas, municipal councilors (who are democratically elected) also serve as advisers to the iNkosi and the Traditional Administrative Council¹². The uNdunankulu acts as a prosecutor unless the matter is referred to the Magistrate Court. The Magistrate Court can call on the uNdunankulu to give evidence.

Figure 6: Traditional governance structure in KwaZulu Natal



Source: Alcock & Hornby, 2004:8

¹² The Traditional Governance and Framework Act (2003) stipulates that Traditional Councils should consist of no more than 30 members, depending of the needs of the community concerned, that at least a third of its members must be women, and a further 40% be democratically elected members of the traditional community.

Appendix 5: History of the Mdukatshani Rural Development Project (MRDP)

Contact: Mdukatshani Rural Development Project (MRDP): Mr. Rauri Alcock, P.O. Box 795, Hilton 3245, Republic South Africa; khonya@yebo.co.za (ZAR Public Benefit Organisation No 930001183).

Mdukatshani is a South African non-profit Non-Governmental-Organisation (NGO) (www.mdukatshani.com). It was founded and registered in 1975¹³ and since that time it is based between Weenen (30 km) and Tugela Ferry (and 20 km) at the Tugela river in the Langalibalele municipality (Uthukela district, KwaZulu Natal province, South Africa). The main activities are carried out in the municipalities of Langalibalele and Msinga (see Figure 1).

There are three sub organisations under the Mdukatshani name the main project of Mdukatshani is the “Mdukatshani Rural Development Project” (MRDP) (Figure 7). MRDP facilitates multi-stakeholder processes of joint learning and technology development, through engaging farmers, NGOs, Government and private sector.

After many years of activities in land reform, MRDP changed 1999 into capacity development for sustainable livelihood of rural households through empowering especially of women and youth in agricultural production and productivity. Chicken keeping and gardening in the commercial gardening plots at the Furrow irrigation scheme was the beginning, but the agenda shifted in 2011 towards chicken and goat farming development. Since 2014 MRDP focuses on the development and implementation of appropriate technological models for sustainable livelihoods through livestock keeping, animal health management and entrepreneurship.

MRDP is a partner in the “Goat Agribusiness Project” (GAP; www.gapkzn.co.za)¹⁴, a partnership with the NGO “Heifer Project South Africa” (HPSA; www.hpsa.org.za), the National Department of Rural Development and Land Reform and the Provincial Department of Agriculture and Rural Development (KZN DARD). The total project budget is 70 Million Rand (2019: 15 Rand = 1 Euro) and is being implemented in 5 district municipalities of KZN (Umzinyathi, uThukela, uThungulu, Zululand and uMkhanyakude). MRDP is responsible for the GAP activities in the Msinga municipality (Umzinyathi district municipality) and the Weenen area under the uThukela district municipality. GAP is supported by the European Union from 2017 to 2021 (800 000 Euro).

¹³ The previous organisation of Mdukatshani, CAP (Church Agricultural Project), was founded in 1965 as a joint venture of the Catholic, Anglican and Lutheran Churches and established at Maria Ratschitz Mission farm near Wasbank, northern Natal. It was led by Neil Alcock (UK), the father of Rauri Alcock, the recent manager of Mdukatshani and MRDP. In 1975, CAP and Neil Alcock's family moved to the exploited and degraded 2,500 ha farm *emDukatshani* (“The place of lost grasses.”), close to the small village Weenen. The farm became the name “*Mdukatshani*” (Sato 1997).

¹⁴ The KZN Goat Agribusiness Project (GAP) seeks to improve home food security and rural livelihoods leading to helping to lift farmers out of poverty. This will be done through a process of improving goat productivity and increasing commercialisation of homestead herds in these areas focusing primarily on youth and women.

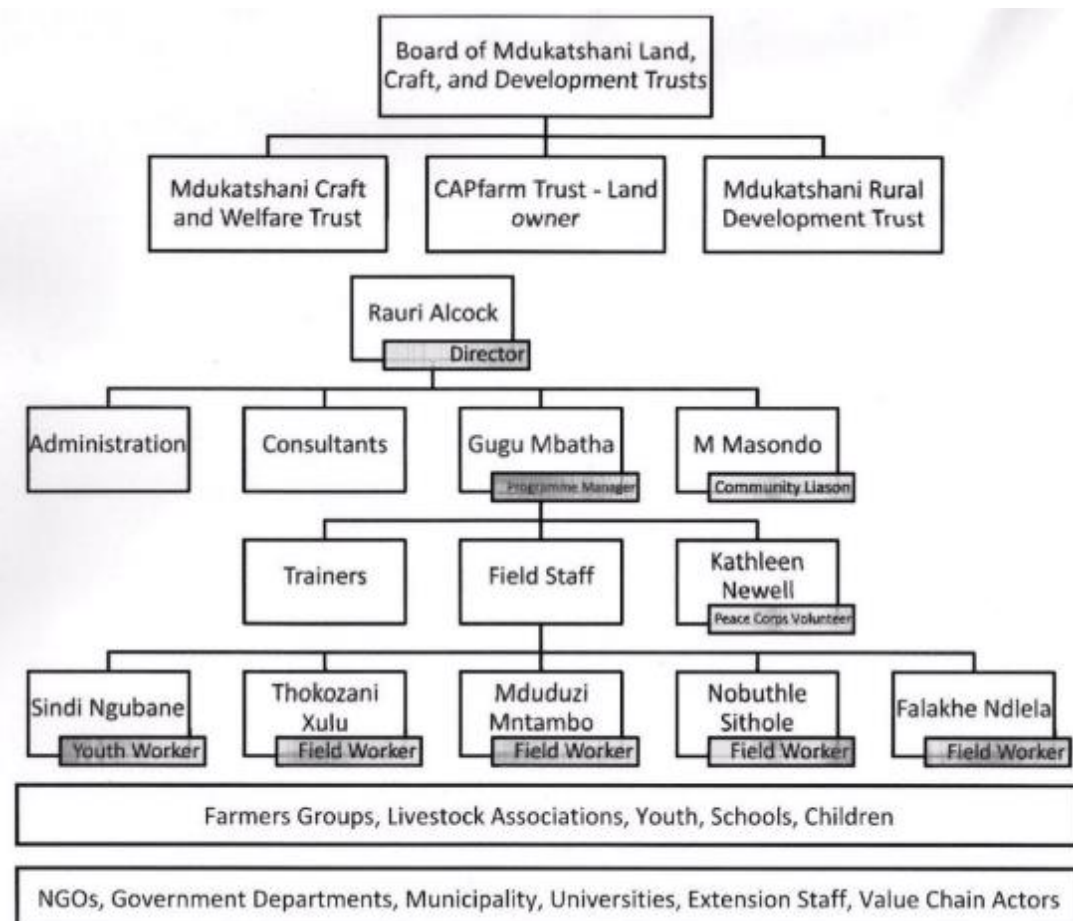


Figure 7: Organigramme of Mdukatsani Land, Crafts, and Development Trust

MRDP project frame condition description (Alcock 2014 and 2019)

Mdukatsani was developed by what was originally known as Church Agriculture Project (CAP). CAP was established in March 1965 at the Maria Ratschitz Mission farm near Wasbank in northern Natal, under the management of Neil Alcock, the father of Rauri Alcock, the recent Mdukatsani and MRDP manager. In 1975 CAP moved its operations to a degraded 2,500 ha farm (named by staff Mdukatsani, “the place of lost grasses”) in the Weenen district. The farms boundary adjoined the Msinga district of the then homeland of KwaZulu.

CAP’s main farming project was planned as an environmentally friendly cattle co-op, which would involve rehabilitation of the land. A large emphasis was put on building trust between CAP and the local people in Msinga in order “to grow grass, and to teach others to grow grass” with them. However, by 1977 CAP projects had gradually changed in response to what they were encountering. The projects involved:

- Drawing local people into subsistence agriculture through their weekly agricultural course (lectures and demonstrations); and offering loans to smallholders who completed the course.
- Starting a vegetable garden project for women on Mdukatsani;
- Allowing local people to graze their own cattle on the farm in return for their labour for veld rehabilitation.
- A school was set up for children.
- Community water projects were pursued to provide water for irrigation.

The progress of community projects was slow. One reason was that work was disrupted as men disappeared to look for work; some only long enough to earn a bag of *mealiemeal*. Another difficulty lay in the intricate nature of the landholding system in KwaZulu. Deeper involvements with the local community led to CAP's staff being confronted with all sorts of problems local people faced. These ranged from assisting old people to get pensions, to arranging lifts for critically injured people to the hospital, to calling police to report incidents of shooting. This welfare work was not part of CAP's plans, but it could not ignore these calls upon it. During 1979 CAP began to be approached by several different groups of evicted labour tenants who had nowhere to go. The revival of massive removals of labour tenants in Weenen district at this time was caused by the change in government's attitude towards the enforcement of the law against labour tenancy, which it began to pursue with vigour. Alerted to the significance of problem, CAP became instrumental (Sato 1997) in enlisting wider support for evicted farm residents, through active organising, lobbying and advocacy.

A serious drought in the early 1980s coincided with the mass removals from farms, bringing hardship and increasing racial tensions. In order to mitigate the devastating effects of the drought CAP became involved in distribution of *mealiemeal* supplied by the Red Cross. Initially CAP distributed drought relief food in the form of free hand-outs to families in need. However, after experiencing problems in categorising the poor, instead of giving away food CAP organised new community projects and provided people with *mealiemeal* in exchange for labour. CAP developed bone exchange projects; where it swapped *mealiemeal* for bones. These were burnt and milled into bone meal, which was used as a stock lick and phosphate fertilizer.

As racial tensions worsened an increasing number of victims of arbitrary and merciless conduct by white farmers asked for legal help from CAP, which began to be handled by the Legal Resource Centre in Durban from late 1981. CAP not only sought support for victims but also played an active role in convening meetings to seek to mediate the intensifying racial tensions.

The eighties were an intensely difficult time, as along with the forces described above there was also increasing conflict in Msinga itself. Neil Alcock now also found himself acting as a mediator in a series of bloody "wars" between Zulu factions, which eventually cost him his life in 1983.

Uncertainty was created through the planned implementation of a betterment scheme and resultant removals of an estimated 20,000 people in CAP's neighbourhood in order to create "buffer zone" between white farms and KwaZulu. CAP decided to shift to a renewed focus on reclamation work on the farm Mdukatshani itself at the beginning of 1985. The farm began to show fruits the rehabilitation efforts. During this time the general local security conditions deteriorated. Several CAP vehicles were stolen, and CAP had to be helped by the armed police guard on its payday. Local white farmers continued to suffer from stock theft, and even the tribal authority became victim of theft. Intermittently through the following five years conflict impacted on CAP's staff and local people and therefore on the work CAP did.

In 1986 CAP had a serious funding crisis and faced closing down the organisation, as its traditional donors changed their priorities. After active efforts CAP succeeded in finding grants for reclamation work, communal garden, bones and acacia pods exchange, communal goats herd, natural resource management of the farm, training for staff, and legal aid and welfare.

In 1989 CAP split into three different project activity lines, each of which ran its own account, and this continues today. And the three legal entities created in 2009 reflect this (see Figure 7).

- Mdukatshani Rural Development Trust (MRDT): representing the project that works with farmers and livestock in the Weenen Msinga area.
- Mdukatshani Craft and Welfare Trust (MCWT): Carrying the handcraft and welfare components. The craft component has developed into the current successful profit-making bead export program involving 150 women.

- The welfare component: Activities are mediated when welfare programs come to the area. It therefore has no continuous activities and at the moment no specific project is underway.
- and the CAPFARM Trust : established to carry the land component till it was transferred back to the community.

The political change of 1994 led to the new land reform law, policy and programmes. CAP, along with all NGOs, had to find its way into a new set of roles and relationships. The work CAP had been involved in with regard to land put it in a strong position to contribute to the new policy and to assist local communities to benefit from the programmes.

In 1999 Misereor began funding the activities of the MRDP. After facilitating successful land reform for the communities, it was helping, MRDP became more involved with the challenge of land use possibilities. In 2001 it started focusing on land reform management and “post land reform activities”. This led to a longer-term focus on livestock and more specifically livestock owned and controlled by the poor and vulnerable.

The project has clearly evolved in response to the needs of the communities it works with and the changing context. The MRDP should thus be seen within the context of its history and the changes (change in CAP, in the Msinga area, and South Africa more broadly) that have shaped it. The MRDP draws strongly on its experience, knowledge and relationships, while seeking to learn from new inputs and what others’ experiences have to offer.

Mdukatshani’s land future

Mdukatshani has been trying since 1994 to donate the farms it has held in trust since 1975. Although we have been at the forefront of land reform in the area there has been a resistance by the state to transfer this farm as ‘it doesn’t fit into their policy’ which states that they must label the tenants as either Occupiers under the Extension of Security of Tenure Act (ESTA) or as Labour Tenants under the Labour Tenant Act (LTA) as the farm has always been a refuge from apartheid era laws these tenants don’t fit these categories.

After much negotiation we have agreed to sell the land at a nominal price set by the department, as this then fits their policy better than if we donated it. A legal body called CAPfarm Trust was set up for the purpose of transferring the farm and dealing with any processes related to this. Two of three farms that comprise Mdukatshani are in the long process of being transferred back to the community of Ncunjane. The final one Lorraine will then be negotiated with the Mashunka community for the same process to happen.

It is envisaged that the project and the 6 families living around the project will retain 150 hectares of the original 2,500 hectares to continue the projects work.

Appendix 6: Full itinerary of MRDP Evaluation, May 8-27, 2019

GR: Prof. Dr. Gerold Rahmann (Evaluator, Germany)
MS: Dr. Monique Salomon (Evaluator, South Africa)
RA: Rauri Alcock (MRDP CEO)
MG: Marisia Geraci (HPSA CEO)
GM Gugu Mbatha (MRDP Project director)
NM Nhalnhla Mthembu (translator)
MRDP: Mdukatshani Rural Development Project
GAP: Goat Agribusiness Project

May 8, 2019: Travel GR

17:00: Travel GR from Oldesloe (Germany) to Pietermaritzburg (South Africa)

May 9, 2019: Pietermaritzburg: arrival, first meetings

13:30: Arrival GR in Pietermaritzburg
14:00 – 16:00: GR, RA, MG meeting.
16:00 – 17:00: GR, MS meeting
18:00 – 21:00: Dinner evaluators with MRDP, GAP project staff

May 10, 2019: Pietermaritzburg: Experiments visit and staff meeting

08:30 – 09:30: Introduction to MRDP training material
09:30 – 11:00: Attending a farmers training course (goat experiment) at Research Station
11:00 – 13:00: Attending classroom on-station farmers training course (including discussion)
13:00 – 14:00: Interview with scientist at the station about experiments for goats
14:30 – 17:00: Discussion with MRDP staff

May 11, 2019: Pietermaritzburg: Document study

09:00 – 17:00: Document study

May 12, 2019: Field trip 1

10:00 – 12:30: Discussion with MS
13:00 – 15:00: Travel to Weenen, discussion with MRDP staff
15:00 – 16:00: Visit a dip tank in Weenen, discussion with RA
16:00 – 18:30: Discussion about MRDP development 2014-2020 Misereor support

May 13, 2019: Field trip 1: Weenen

07:30 – 10:00: Visit of goat dipping
10:00 – 11:00: Visit of a farm input store
11:00 – 12:00: Visit of goat kids mortality reduction intervention
12:00 – 12:30: Visit of Acacia pot fodder shredding
12:30 – 14:00: Focus group discussion with dip tank group
15:00 – 17:00: Visit of Mdukatshani farm, discussion with MRDP staff
17:30 – 19:00: Wrap up of the day with MS, RA, MG, MRDP staff

May 14, 2019: Field trip 1: Msinga

08:00 – 09:00: Visit of goat farmer with kid enclosure
09:00 – 10:00: Visit of chicken experiment: improved rearing
10:00 – 11:00: Discussion with local municipality chancellor
11:00 – 12:30: Attending a training of a women chicken group
12:30 – 14:00: Attending a training for CAHWs in the town hall
14:00 – 15:30: Focus group discussion with CAHWs
16:00 – 18:00: Mission discussion with MRDP and stakeholder mapping

May 15, 2019: Field trip 1: Tugela Ferry

09:00 – 10:00: Interview with MRDP board member
10:00 – 11:30: Visit of women chicken group training
11:30 – 12:00: Visit of vegetable garden woman
12:00 – 12:30: Visit of chicken feeding experiment
13:00 – 14:00: Visit of Tugela Ferry, discussion with MRDP staff
13:30 – 14:30: Visit a peri-urban women household
15:00 – 17:00: Visit the local office of MRDP
17:00 – 19:00: Discussion of findings with MRDP staff, MS, MG

May 16, 2019: Field trip 1: special activities MRDP

08:00 – 09:00: Introduction into M&E for MRDP/GAP project
09:00 – 10:00: Drive to Tugela Ferry, discussion with MRDP staff
10:00 – 11:00: Market survey in Tugela Ferry
11:00 – 12:00: Observing GAP/MRDP mini market
12:00 – 13:00: Interview with two board members of MRDP
14:00 – 15:00: Focus group discussion with women chicken group
15:00 – 16:00: School Animal health club: brick making show

May 17, 2019: Field trip 1: stakeholder and partner meetings

09:00 – 11:30: Livestock Association Msinga district – Executive board
11:30 – 17:00: Drive to Jozini /Zululand district (GAP project area, MRDP free)

May 18, 2019: Field trip 1: non-Mdukatshani areas

09:00 – 12:00: Observation via cruising in Jozini district (MRDP free district)
14:00 – 17:00: reading documents and notes, preparation of coming week

May 19, 2019: Field trip 1: non-Mdukatshani areas

07:00 – 14:00: drive from Pongola to Hilton

May 20, 2019: Pietermaritzburg: Intermediate wrap-up or evaluation

08:30 – 17:00: Discussion of open questions with MS, RA, MG, project staff

May 21, 2019: Field trip 2: missing information gathering

07:00 – 08:00: Individual MRDP staff interview
08:00 – 09:30: Focus group discussion with another Livestock Association
10:00 – 11:00: Interview with Livestock Veterinary service
13:00 – 14:30: Visit of a “project free village in Msinga” (7 women, 1 man)
15:00 – 18:00: Discussion with RA, MG, MS: wrap-up the day
19:00 – 20:30: Discussion with GAP staff: “Mdukatshani free areas”

May 22, 2019: Field trip 2: collecting missing information

08:00 – 09:30: Interview meeting CAHWs
10:00 – 11:00: Meeting no-project youth
13:00 – 15:00: 2nd interview with Livestock Association Tugela Ferry
15:00 – 16:00: Wrap-up field trips with MRDP staff
16:00 – 18:00: Preparation of workshop agenda and presentation with MS

May 23, 2019: Pietermaritzburg: visits and interviews

08:00 – 09:00: Meeting with Dep. of Agriculture (failed, person not available)
09:30 – 11:00: Interview with Veterinary Service KZN (GR)
10:00 – 11:00: Interview with Dep. of Rural Development KZN (MS)
13:00 – 14:30: Interview with scientist University of KZN
15:00 – 16:00: Visiting booth MRDP/GAP at Royal Agricultural Show
16:00 – 18:00: Preparation of workshop GR, MS
18:00 – 19:30: Interview with scientist, working for Government

May 24, 2019: Pietermaritzburg: workshop day 1

09:00 – 18:00: Evaluation discussion with MRDP board and staff

May 25, 2019: Pietermaritzburg: workshop day 2

09:00 – 15:00: Evaluation discussion with MRDP board and staff

May 26, 2019: Pietermaritzburg: Interviews and visits

11:00 – 12:00: Discussion MS and GR

12:00 – 13:00: Visit MRDP/GAP sheep/goat exhibitions at Royal Agricultural Show

13:00 – 14:30: Interview with IVG chair

14:30 – 16:30: Final discussion evaluation MS and GR

17:00: departing GR back to Hamburg

May 27, 2019: Travel GR

13:00: Arrival GR in Oldesloe (Germany)

Appendix 7: MRDP publications 2015 – 2019

Table 6: Publications of MRDP 2015 - 2019

Publication	year
Livestock training calendars developed and revised and printed as training material – distributed across the province	2015
Goat feeding block developed with farmers and feed companies – tested and written up in goat book as well as on the internet with training videos on how its made	2016
Stover processing of local produce tested on kids and goats training video and added to goat book and calendars	2016
Feeding enclosures with small herds – written up in goat resource book and video training added to website	2017
Goat Diptank developed and modified from Ncunjane – written up in revised goat book	2017
Integrated goat training system rewritten into calendars and extensively revised and reprinted	2018
The indigenous goat auction system created with farmers and auctioneers written into goat book and presentations to policy makers	2018
100 kid experiment looking at larger scale herds and commercialising through supplemental feeding kids for first 3 months to reduce mortalities tried out written up and distributed through internet and public talk to deputy president and farmer groups	2019

Appendix 8: MRDP communication with government

Table 7: MRDP communication with policy makers

No.	Policy maker or forum	How approached?
1	Provincial Minister Department Agriculture,	Asked to meet through board member t
2	National minister of Agriculture	Invited to project
3	President of South Africa	Invited to launch auction yard
4	King Zwelthini of the Zulus	Invited to launch goat meat and indige- nous goat production initiative
5	300 Extension staff from Dept Agric ex- tension summit	Invited to talk
6	Drought summit	Invited to talk
7	National agricultural magazine summit on the future of agriculture in rural areas	Invited to talk
8	Establishing a national goat meat policy	Invited to talk
9	Indigenous Veld Goat society AGM	Invited to do keynote
10	Alternative strategies to cane farming	Invited to talk

Appendix 9: Social Return on Investment framework and methodology

Stage 3		Stage 4												
(anges)		Indicator	Source	Quantity	Duration	Financial proxy	Value £	Source	Dead-weight %	Displacement %	Attribution %	Drop Off %	Impact	Action Plan
How would you measure it?		Where did you get the information from?	How much change was there?	How long does it last?	What proxy would you use to value the change?	What is the value of the change?	Where did you get the information from?	What would have happened without the activity?	What activity did you displace?	Who else contributed to the change?	Does the outcome drop off in future years?	Quantity times financial proxy, less deadweight, displacement, and attribution.	What needs to be done	

Figure 8: Social Return on Investment framework and methodology (SROI 2012)

Appendix 10: Selected pictures from the field trips



Picture 1: The landscape of Msinga with stony hills, scattered houses, a river with crop cultivation, thorn bush vegetation for grazing livestock in a semi-arid climate (May 2019, before dry season)



Picture 2: Goat browsing an Acacia tortilis up to a level of 2 m. Above the pots and leaves are not reached (probably 50% of the fodder).



Picture 3: Dense Acacia tree grazing/browsing area for goats. Close to the kraal the grass/herbs is degraded, but the trees have some green leaves (not reachable by goats)



Picture 4: Collection of Acacia pods for shredding as fodder. In this kraal the Acacia trees do not show any sign of barking. Acacia trees are not destroyed by goats.



Picture 5: Cattle kraal with the stone made grave yard of the dead owner in Msinga



Picture 6: Shredding of collected roughage for feeding of goats. Farmers have never collected fodder for livestock before. CAHWs can offer shredding service.



Picture 7: Communal Animal Health Workers (CAHWs) in a training for goat health evaluation (done by MRDP/GAP staff).



Picture 8: Goat dipping was introduced by MRDP/GAP and is a great success. Before, only cattle dip tanks were in the area, but they are not suitable for goats. The goat farmers were very well organized and qualified to do this monthly activity.



Picture 9: Goat night kraal, a lot of manure is available for vegetable production and income generation.



Picture 10: On-farm experiment to reduce goat kid mortality with better shelter (enclosure), treatments (preventive heartwater-antibiotics, vitamins) and improved fodder (Acacia pots and leaves). Too much for farmers, but a successful experiment.



Picture 11: Cerada on-station goat feeding and breeding experiments (GUI): farmers training by scientists. Motivated done, but not convincing prepared and communication of wrong/doubtful results.



Picture 12: Women chicken group is trained by MRDP staff (vaccination). It was not a show case for the evaluation.



Picture 13: Chicken housing with available material to protect chicken from predators. This experiment does not work properly. The nests are an innovation from MRDP to avoid eggs laid somewhere in the house compound



Picture 14: Chicken housing and feeding experiment at a very weak and handicapped women household.



Picture 15: GAP staff and board members of Livestock Associations wear shirts and jackets with governmental logos, but governmental partners are not recognized by beneficiaries.



Picture 16: School Animal Health Club showed the making of protein blocks (especially for the evaluation).



Picture 17: Marketing of MRDP/GAP project in a Msinga Tuck Shop. Products can be purchased and information gathered easily by farmers.



Picture 18: Adjacent to a hypermarket in Tugela Ferry a Mini Market for local goats, chicken, MRDP/GAP information material and CAHWs products (protein blocks, leather bags) established



Picture 19: Chicken at the mini and the hyper market in Tugela Ferry in May 2019



Picture 20: Stakeholder and partner mapping of MRDP (evaluators and MRDP staff).



Picture 21: Workshop “preliminary findings of the evaluation” with MRDP board members and staff in Pietermaritzburg

Appendix 11: Goat Agribusiness Project (GAP)

Web-address: www.gapkzn.co.za



Picture 22: The joint Goat Agribusiness Project (GAP) of MRDP, HPSA and the government (started in 2015).

Partners

- 1) Mdukatshani (MRDP; www.mdukatshani.com) with Misereor as financial supporter (769,000 Euro from 2014-2020 – the two evaluated projects),
- 2) NGO “Heifer Project South Africa” (HPSA; www.hpsa.org.za) with the EU as financial supporter (800,000 Euro from 2017-2021),
- 3) the National Department of Rural Development and Land Reform of the Republic of South Africa (DLA; www.dla.gov.za) with 45 million Rand and
- 4) the Provincial Department of Agriculture and Rural Development of KwaZulu Natal (KZN DARD; www.kzndard.gov.za) with 6.5 million Rand from 2015-2021.

Vision and Objectives

Vision

- Improve productivity of goat herds in KZN
- Improve nutrition of mothers and kids leading to better productivity
- Health interventions in local goat herds through use of trained Community Animal Health Workers (CAHWs)
- Research that feeds into innovation platforms
- Value chains including market linkages –skins, meat and goat exports
- Formalising and growing the marketing of goats
- Youth job creation in creating microbusinesses to provide feed and related productively improvement measures to farmers Objectives

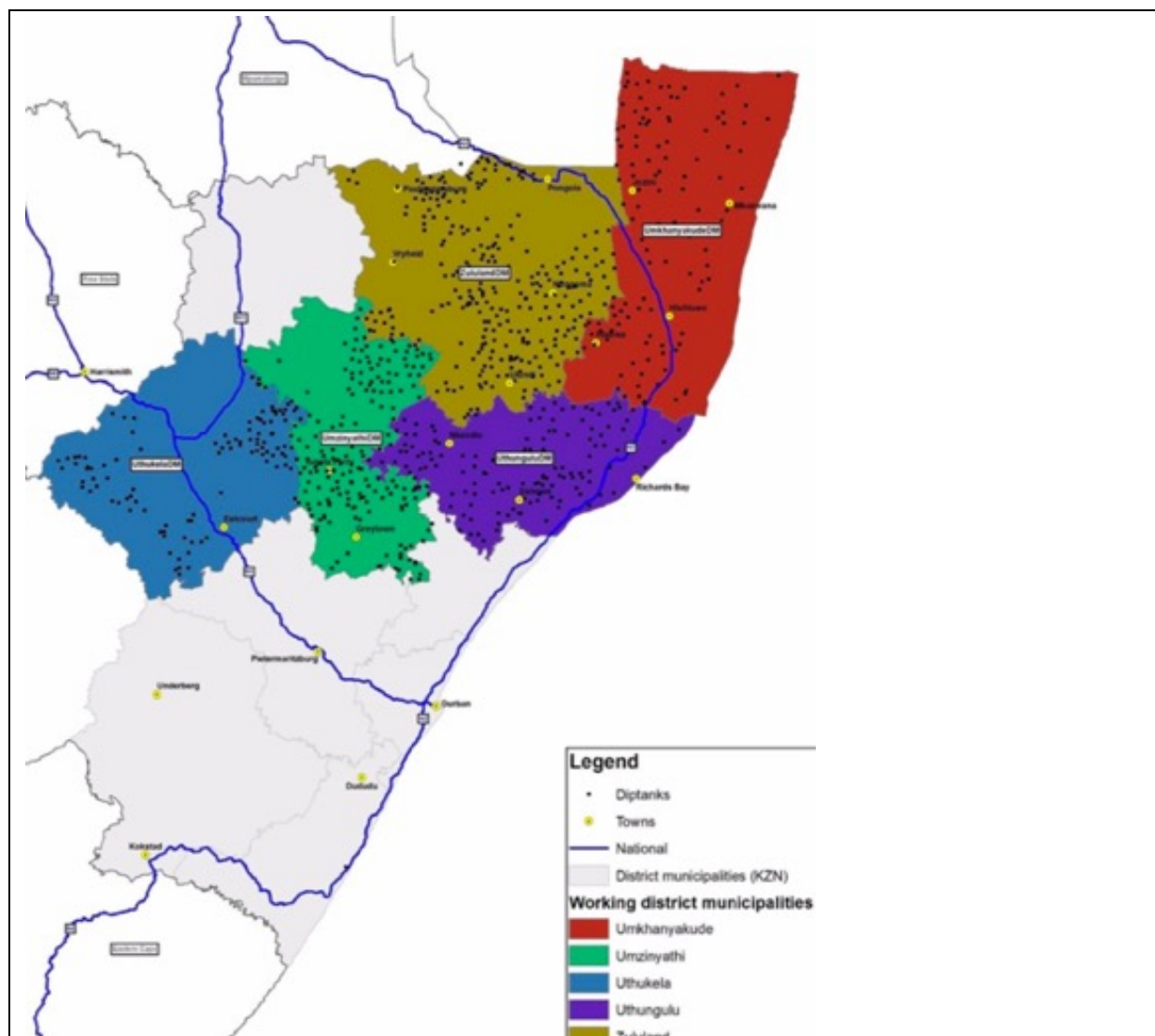


Figure 9: The dip tanks in the 5 districts of the Goat Agribusiness Project
(compiled from GAP 2015 and www.gapkzn.co.za)

On the community level:

- Livestock productivity amongst the poorest is increased improving food security
- Wealth generation in herds
- Farmers get to sell improved off take
- Youth are given job opportunities and small business opportunities
- Five District Municipalities of the poorest people in KZN are elevated out of poverty Specific goat owners will benefit from the following:
 - Improving productivity of their flocks through training and extension support;
 - Health interventions towards improving animal productivity and kidding percentages, survival and specifically twinning;
 - Generation of income from the increased offspring
 - Marketing and value adding facilities.

At a departmental level:

- Goat training materials will have been developed and be available for extension staff across the province

- A model to support small farmers in commercialising goat herds will have been developed and documented
- An innovation platform will be meeting regularly and generating ideas for research and experimentation around critical questions in goats
- Veterinary staff to provide a Veterinary Health Calendar / management plan per pilot dip tank.
- Veterinary staff to assist with oversight of CAHW administering vaccination, dips and required veterinary remedies.
- Veterinary staff with CAHW to collate records of diseases and mortalities and provide to Local Project Goat Committee meetings.
- Promote the use of uncontaminated feed and supplements.
- Ensure adequate fresh water available at all times.

Community Animal Health Workers

- Promote and apply goat identification through tattoos and/or ear tags.
- Record deaths, births and acquisitions of pilot.
- Record sales and exchanges of pilot.
- Promote construction and use of shelters.
- Link local sales to local pension points.
- Promote marketing through existing sale yards.

CAHWs will conduct Farmer field days/theme days and exchanges and support small groups to be set up so that they can come together and discuss issues. Additionally, the CAHWs to work with 10 farmers (lead or experiment farmers) in each dip area to work with kid feeding (creep feeding and structures) with the goal of farmers expanding this among themselves.

Improve productivity of flocks to reduce stock mortality

- Treat critical diseases through vaccination and management.
- Control ecto- and endo-parasites.
- Provide advice on managing the grazing lands / range for more and better feed production.
- Promote the production and strategic use of supplementary feeding.
- Record seasonal diets and supplementation.
- Promote goat identification, traceability and record keeping.
- Promote disease surveillance.
- Record births and mortalities.
- Record purchases and sales.
- Ensure that pilot research has impact – scale up technologies.
- Training of goat farmers.
- Promote the availability and use of lick blocks.
- Record the intake of licks of pilot group.
- Promote the availability and use of creep feeding of kids below 2 months.
- Collect and process Stover from the fields for goat feed.

From MOU with Department of Rural Development and Land Reform

1. The project will operate in the five District Municipalities of Mzinyathi, Thukela, Uthungulu, Zululand and uMkhanyakude. Each district will be considered a project area (5 projects).
2. By the end of the 5 years, there will be a total of 140 dip tanks in this project. Thukela (30) and Mzinyathi (10) Uthungulu (25) Zululand (50) and uMkhanyakude (25).
 - Year 1- 20 in Thukela and Mzinyathi; 5 in Uthungulu; 10 in uMkhanyakude and 5 in Zululand for a total of 40 dips
 - Year 2- an additional 5 in each local municipality for a total of 65 dips
 - Year 3- an additional 5 in each local municipality for a total of 90 dips
 - Year 4- an additional 5 in each local municipality for a total of 115 dips
 - Year 5- an additional of 5 each local municipality for a total of 140 dips
3. There will be 7 Livestock Associations involved.

4. At each dip tank 5 youth jobs will be created for a total of 700 microbusinesses managed by a Community Animal Health Worker (700 CAHWs)
5. The 700 microbusinesses are comprised of the following
6. blockmaking (140),
7. skins (140), hay processing (140) and
8. animal health support (280)
9. These initial 700 CAHWs will be paid stipends for the first year while they receive training. This is not included in the budgets contained within this agreement. This will be handled separately and directly with the CAHWs. Thereafter, they will receive a start-up kit and the subsidy will be discontinued.
10. 100 million rand extra value generated in livestock herds in the five local municipalities mentioned (Mzinyathi, Thukela, Uthungulu, Zululand and uMkhanyakude).
11. 7000 farmers will be actively commercialising their herds with a focus on women farmers
12. Goat productivity will double in the five areas
13. Goat imports will be reduced from other provinces and African countries
14. The projects will aim for fulfilling future export demand of live foot and mouth free goats
15. A center of excellence will be created on goat research for Southern African goat farmers
16. Publications and training curriculum will be developed so as to be able to capture these
17. learnings and be able to share them outside of these pilot areas and outside the province.

From Service Level Agreement Specific Responsibilities

The Department of Rural Development and Land Reform

- Sign Contracts first year for the CAHWs
- Facilitate budget to provide vet kits
- Facilitate budget to provide uniforms for CAHWs in year one and three
- Facilitate budget for 2 portable sales yards per livestock association
- Facilitate budget for setting up Agrivet shops
- Facilitate budget for trainings and facilitations, monitoring and evaluation and project administration to the 2 NGOs for 5 years
- Facilitate budget for innovation platforms in conjunction with HPSA and MDUKATSHANI
- Facilitate budget for the set-up of goat skin value chain businesses
- Facilitate budget supplementary feeding for small businesses and winter feeds
- Facilitate budget for training events farmers' days and cross visits
- Facilitate budget for piloting enclosures for goat kids in farmers' yards

Mdukatshani and HPSA

- Establish a system of record collection and keeping by CAHW
- Training and mentoring of CAHW
- Collect manage collate and share the baseline livestock data
- Train and support livestock associations in management and good governance
- Co-ordinate and promote relevant research to support farmers in the field
- Provide training support to workshops arranged by the Departments
- Provide training and mentoring of CAHWs in the project area
- Establish train mentor and support agrihubs with - appropriate medicine sales and cold chains in local towns
- Provision of matching funds for Msinga
- Coordinate and facilitate Innovation platforms and research and exchange visits
- Co-ordinate implementation of inputs, projects and pilots and purchase and use of the materials provided
- Monitoring of implementation for quality control
- Mentor woman goat farmers to improve home goat productivity and sales
- Initiate and co-ordinate and promote auctions in the 5 districts
- Train CAHW in small business development and provide them with starter kits and mentor them with skills to initiate and continue these businesses

Appendix 12: CAHWs contract example



1. Commencement and selection

I _____ The CAHW from _____ chosen
by _____ on a meeting held at _____ on
the _____
This contract will be effective from _____ to _____

2. Employment status

I understand I am not an employee of GAP or GAP partners, but they are supporting me through short term stipends to set up my own businesses. These are reliant on my attendance and adherence to a standard of compliance. After 9 months GAP will only pay for these following tasks; census, sales sheet, baselines and monthly sales.

3. Equipment and training

I will be given, or I have already received, the following equipment on completion of 4 trainings and passing an examination and final assessment by GAP staff, livestock associations and veterinary dept officials.

- a. A vet kit
- b. GAP uniforms

With relevant hands on training I will be given access to the following shared equipment which I will use to further my business

- a) A block maker
- b) A starter mix
- c) A hammermill

The following forms will be supplied to me and I will be trained on

1. Baseline
2. Census
3. Treatment sheet
4. Inventory sheet
5. Block and hammermill sales sheet
6. POE forms
7. Training sheets
8. Vaccination sheets
9. Stipend claim form

4. Stipend payments and tasks

Payments for activities will be as listed below – each activity and the quality of intervention will be checked and signed off by the GAP finance representative.

Before payment there will be verification of the various activity outcomes by head office and this could include direct visits to farmers to ensure compliance.

GAP's responsibility is to have CAHWs with full vet kits to be able to serve the Diptanks' farmers. Where vet kit inventories show deficits in stock, or expired medicine, from non use, stipends from GAP will initially top up the medicines missing in the vet kit at cost price. This includes the top up process where slips are not available. This would apply for the first year.

Your tasks and potential stipend claims will be the following

Task to be compensated	Assumptions/units/ permissible tasks	Hours	multiply	Per unit per day	Total
Census	2 CAHWs per dip 280 homes per dip tank area within 7 days in March every year. 20 interviews per day	8	R14	112 x 7 days	R784
Sales sheet	Added question --a detail of sales at Easter and Christmas – could be at different times than census to catch sales		R3 rand per interview		
Baseline	In selected areas – return to same people must be finished within 5 days. 3 questionnaires per day.	8	R14	R112	
Stover processing	Farmer paying for petrol and CAHW working	1	R14 R6 petrol		
Dip tank assistance	Helps record keeping and vaccination programs, support counting cattle, taking minutes, treating animals if there are sick, selling blocks	3	R14	R42 x 2day a month	R84
Experiments	Visits experiment site and takes records of feed mortalities and weight and interventions around health		R14	R56 X4 days a month	R224
Treating member farmers animals	Fill in farmer details and check against member lists		20% incentive		
Monthly sales	Mini sales- recruit farmers goats - treat them, take names/numbers of farmers, tattoo goats - gender of goats- ensure sales permits are filled in		R10 rand per goat- minimum 40 goats sold per sale		R400
Vaccination days and theme days	-Training materials, vaccine and flask will be provided. -POE completed with ID copies		R14	R56 x 2 days a month	R112
Goat dip days	Record keeping of goats dipped		R14	R42 x 1 day a month	R42

******stipend for tasks performed will only be paid for a nine-month period******

5. Termination processes

Should I no longer want to be a CAHW I will inform my dip tank chair and I will return this equipment to the chair and GAP.

6. Management process

I will be supervised, assisted and monitored in my work by Livestock Association, DARD, DRDLR and GAP.

7. Signatures

I, _____, have read, understood this and will abide by this.

Signed and confirmed by _____ Date _____

DRDLR _____ DARD _____

GAP _____ Livestock Association _____

Appendix 13: SWOT MRDP

A SWOT analysis has been used for the evaluation workshop on May 24-25, 2019 in Pietermaritzburg to discuss the preliminary key findings. Following findings have been agreed in content by the evaluators and MRDP board members and staff:¹⁵

Table 8: Five main internal Strengths and Weaknesses

5 main Strengths	5 main Weaknesses
<ol style="list-style-type: none"> 1. Mdukatshani is a small local NGO, well-known, respected, flexible in actions, content and conditions (3, 4) 2. Does work with small-scale and low external input farmers, rural women and youth (1, 3) 3. Practice a holistic animal health 5-steps-approach in goat and chicken keeping (1, 2, 3) 4. Focus on adaptable and applicable biological, technical and management innovations (1, 2) 5. Working with traditional and governmental institutions, scientific institutions as well as private business and does consider their permanent structures for activities/ innovations (5) 	<ol style="list-style-type: none"> 1. No exit strategy; MRDP is acting in cooperation with governmental institutions (GAP), but latter are not recognized maybe appreciated by beneficiaries (3, 5) 2. MRDP lacks strategy work (fund-raising, successor-planning, “think out-of-the-box” (5) 3. Very high CAHWs turnover ($\approx 50\%$) (2, 3, 4, 5) 4. Internal structures of MRDP are not enough formalized (activist/pioneer driven), the internal quality control are done by chance (4, 5) 5. Staff and CAHWs capacity development is focused on content, not enough in personal development (4)

Table 9: Five main external Opportunities and Threats

5 main Opportunities	5 main Threats
<ol style="list-style-type: none"> 1. South Africa is a strong country¹⁶: support and funds are available in the country. 2. Government wants and needs improved and functioning service and extension for rural poor, co-operation with NGOs can help to deliver (e.g. GAP). 3. “Rural area” and “rural poor” is not only a social problem but also an economic chance (macro and micro). 4. Markets for agricultural products from small-scale farmers can be developed / strengthened. 5. Education and infrastructure are good developed and becomes better in former homelands. 	<ol style="list-style-type: none"> 1. South Africa is a strong country¹⁶: foreign funds running out. 2. Government institutions and public service quantity and quality becomes worse, or the do not like NGOs anymore (image competition). 3. Increasing grant/aid dependency of beneficiaries or they have other wishes/future plans (youth do not like farming). 4. Multi-resistant germs or not controllable diseases in livestock can occur (livestock keeping becomes difficult). 5. “Becoming a consultant for government, or depended on expectations from donor.”

¹⁵ The numbers in brackets indicate the impact on evaluation objectives: 1=Relevance, 2=Outcome and Impacts, 3=Effectiveness, 4=Efficiency and 5=Sustainability.

¹⁶ Some key socio-economic key figures of RSA: GDPppp 2019 est.: $\approx 14,000$ US\$/cap. (90th); HDI 2018: 0,699 (113th, medium); Gini coef. 2014: 63,7 (very high inequality), BRICS and G20-member, agriculture only 2.6% contribution to GDP, 10 million rural households (compiled from SA statistics, UN-organizations, G20, wikipedia.org).