

# NATURAL LIVESTOCK FARMING E-MOTIVE EXCHANGE EVALUATION REPORT

Mutual learning in an E-motive exchange in India, 2015

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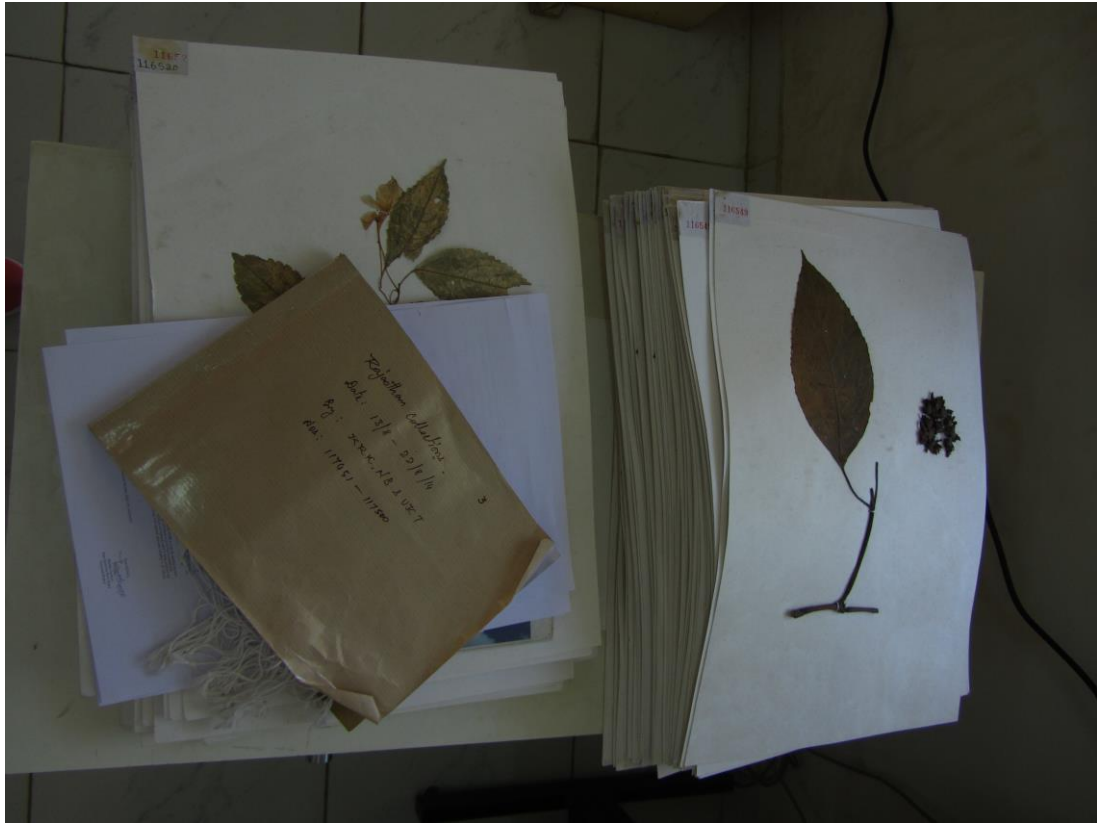
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# 1. INTRODUCTION

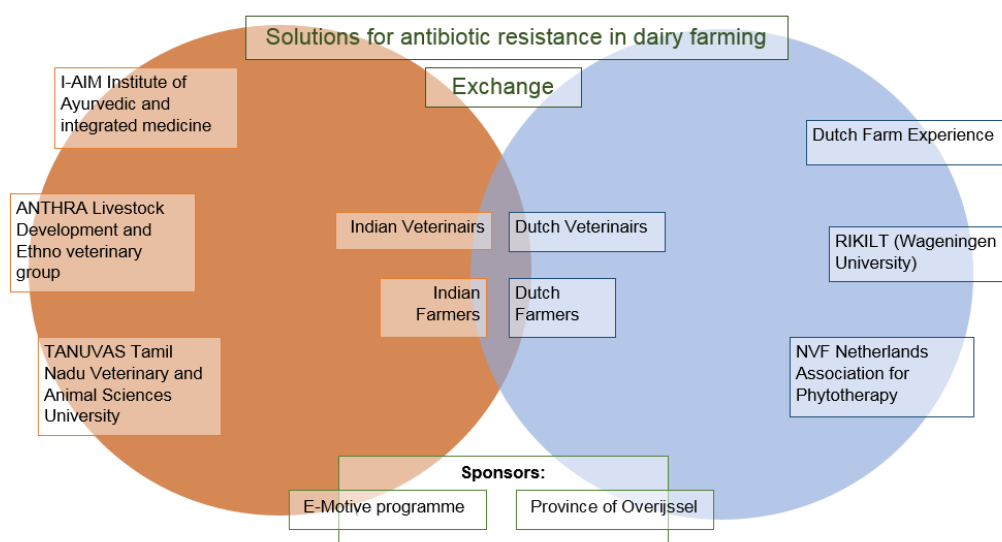
This report evaluates the E-Motive exchange visit to India. Natural Livestock Farming (NLF), based in the Netherlands, visited its exchange partner the Institute of Trans-disciplinary Institute of Health and Technology (TDU), based in Bangalore, India. In E-Motive exchanges, the central idea is that partner organisations from the global South and North, and participants in these exchanges, share their knowledge.

## 1.1. The exchange partner organisations

As stated earlier, the main partners within this exchange are Natural Livestock Farming (NLF) and the Indian Institute of Trans-disciplinary Institute of Health and Technology (TDU).

Natural Livestock Farming is an organisation around sustainable (Dutch) livestock initiatives, with a focus on dairy farming. Through the involvement of organisations and individuals in this sector in an interactive way the initiative aims to contribute to a better world in which milk and other livestock products are produced in a sustainable way. In the various countries involved the aim is to develop and contribute to national dairy strategies instead of simply copying the Dutch system.

The Transdisciplinary University (TDU) is an innovation oriented University, legislated as an autonomous University. The University has been founded by the Foundation for Revitalization of Local Health Traditions (FRLHT) Trust and has evolved from 21 years of its pioneering work. Unlike conventional universities, TDU gives equal importance to research, education and translation/outreach/application of knowledge for societal change. One of the focuses of this university is to preserve and share Indian traditional health practices, such as the use of herbals in the veterinarian practice.



**Figure 1:** Participants and stakeholders in the exchange.

## 1.2. The exchange in 2015

This evaluation report concerns an evaluation study of the E-motive exchange visit to India in the spring of 2015.

The aim of this exchange is to reduce the use of antibiotics, improve quality of dairy products and enhance health and wellbeing in Dutch, Indian and African dairy farming, by strengthening the action-learning community of stakeholders in the dairy chain in the awareness about, use of and access to natural products. High use of antibiotics in dairy farming and multi-resistant strains of microbes are a problem in India and the Netherlands. Several initiatives on antibiotic reduction, with an emphasis on law-enforced reduction of the use of these medications by farmers and veterinarians, animal health improvements, and milk quality control. In India age-old techniques with the use of medical plants and other natural products have been developed and – since the early 1990s – revitalized. This process of documentation, assessment, propagation, and popularization of the use of medicinal plants is unique in the world, and provides important insights for practitioners from elsewhere. In Ethiopia and Uganda, the increased cross breeding and improved productivity of dairy cattle is gradually leading to an increased use of antibiotics and anti-parasite drugs. There is an urgent need to look into antibiotics use in African dairy and to promote alternatives. Increased use of local breeds – both improving local breeds themselves and in a variety of cross-breeding schemes – is seen as one of the possible strategies to reduce the use of antibiotics.

This exchange builds upon earlier exchanges between Dutch, Indian, Ethiopian and Ugandan professionals. This exchange differs from earlier exchanges by means of the composition of the group professionals. This exchange did not just include veterinarians and farmers, but also include people from the animal food industry, academia, research groups and farmer unions.

### *Relevance of the exchange*

High use of antibiotics in farming and multi-resistant strains of microbes are a major problem in animal farming worldwide. According to a recent scientific review study (reference to be inserted), this could lead to a major global crises by 2050, with more deaths than people are dying of cancer nowadays. The global dimension of this problem is emphasized that it is expected that the majority of the victims of this crises will be in the poorer regions of the world.

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### **Box 1. E-motive**

#### **What is E-motive?**

E-Motive is a collaboration between multiple organisations. It's aim is to encourage and support projects working on active citizenship and social cohesion in the Netherlands, Poland and Spain, through exchanges with a range of inspiring methods and rich experiences from organisations in the global South. E-Motive exchanges are characterised by mutual benefit: Northern partners learn about new solutions from inspiring Southern professionals, widening their perspective on the Global South and development cooperation and start implementing the method in their context. Southern partners gain international recognition and expand their networks, thereby speeding up the spreading of their methodology. All parties benefit from local solutions for global problems.

#### **Why E-Motive?**

Mainstream development cooperation is about bringing knowledge and resources from the 'North' to the 'South'. It is often overlooked that people in the Global South have years of experience in, for example, strengthening social fabrics and stimulating active citizenship. E-Motive provides an alternative to the inequality underlying mainstream development cooperation by creating a judgement-free setting of professional equality and mutual learning.

#### **Who are E-motive?**

The E-Motive consortium partners are situated in the Netherlands (Movisie, NCDO Foundation/Kaleidos Research and Oxfam Novib), Spain (Coordinadora de ONG para el Desarrollo-España) and Poland (Stowarzyszenie "Jeden Świat"). In this collaboration, Kaleidos Research (NCDO Foundation) is responsible for conducting research into the effects and impact on the perceived global interdependences and effectiveness of development cooperation, as well as perceptions of the global South in the North of the E-motive exchanges. (Source: <http://www.emotiveprogram.org/about-us>)

### 1.3. The Research

This report is part of a three-year long research project of the Oxfam Novib E-motive program funded by the DEAR program of the EU. Initially the emphasis of the program was on Northern participants learning from colleagues in the global South. The idea behind this focus was offering an alternative to the traditional power imbalances between the global South and North in development cooperation. In the first year of the research, the effects on the Northern partners were the central topic: To what extent (and how) does the exchange program affect the Northern participants behavior, attitude and knowledge about global interdependencies and the effectiveness of development cooperation in addressing common global issues?

After a review of the first year of studying the program, it became clear that the effects in the South (i.e. empowerment, network strengthening) should also be researched, as these effects had not yet been empirically studied. E-Motive wanted to develop itself into a new model for development cooperation, in which cooperation, equality and mutual inspiration for solving global problems are central. E-Motive wanted to involve the South more at strategic level and wanted to offer partners worldwide an online platform where knowledge can be shared. E-Motive needed to know if and how Southern partners want to be involved at these levels. The role and effects of E-motive in the South was the focus of our research in year two.

The third year of the research focuses on mutual learning and the sustainability of the learning relations. Having studied the two main assumptions of E-motive in Year 1 and year 2 we now wanted to see whether or not mutual learning and sustainable learning relations take place within or as a result from the exchanges. What works and what doesn't when it comes to changing perceptions and exchanging local solutions? In brief: what makes mutual learning happen? By studying two exchanges (one in the South and one in the Netherlands) we identified good practices and barriers to mutual learning and sustainability of the program. These insights will provide a more solid base and recommendations for future exchanges in the E-motive program, and also enhance the sustainability of the program.

As stated above, E-Motive's research focuses in year three will be on mutual learning and sustainability. The project as organised by NLF will be used as a *case study* to investigate mutual learning among professionals in the context of an E-Motive exchange. The main research question is:

***To what extent does mutual learning - learning by Dutch professionals involved in the project as well as those involved from India - occur in the context of the Natural Livestock Farming/E-Motive antibiotic resistance project exchange in 2015?***

With this research question, we aim to get insight into the main processes of mutual learning within the exchange and we will address *good practices* and *lessons learnt* so that NLF, other projects and E-Motive in a broader perspective can learn and profit from the case study. Crucial part of these lessons learnt is the sustainability of the learning: what factors exist in the exchange that might barrier or enhance a long-term (learners) relation between professionals. Summarizing, we formulate two additional research sub-questions:

- a) What factors can be distinguished in the context of the *Natural Livestock Farming/E-Motive antibiotic resistance project* exchange that either facilitate mutual learning (good practices) or are a barrier to mutual learning (lessons learnt)?
- b) What factors can be distinguished in the context of the *Natural Livestock Farming/E-Motive antibiotic resistance project* exchange that either facilitate long-term (learning) relations between professionals involved or are a barrier to these long term (learning) relations between professionals?

### *Mutual learning*

The research questions in this study are formulated around the concept of *mutual learning*. What does this mean? Is mutual learning limited to the sharing of knowledge by professionals? Does mutual learning imply any sustainability of the effects (the learning)? Is it possible to have mutual learning with more than two professionals involved? And what are, theoretically, the best conditions for mutual learning? In this project, we will focus on the pure *existence of learning* in the professional relations within the exchange. We've added *mutual*, because of the importance of a two-way information flow. Addressing the shifting notion of North-South cooperation (instead of development aid or cooperation), E-motive is set up around the idea of Northern professionals learning from Southern professionals and vice-versa. The two-way learning principle is thus an important factor in our interpretation of learning.

### *Organisational development: differences between types of professionals*

This research is framed within the broader evaluation research of the E-Motive EU-programme. However, we also included a research question that is of interest to Natural Livestock Farming. Natural Livestock Farming has been working on the antibiotics issue in close cooperation with the Indian partners from 2013 on. A first exchange involving farmers and veterinarians was organised in April 2014, followed by a return visit from the Indian partners to The Netherlands in fall 2014. For the second exchange in India (2015), in addition to farmers and vets, the target group is extended to professionals working in production (e.g. veterinary medicine), policy, education and research. This will not only improve the knowledge available within the project. By addressing a broader target group, Natural Livestock Farming aims to upscale her impact on the knowledge of plant-based medicine use within dairy farming. The organisations impact is based on a 4 level strategy. It aims to achieve 1) improved animal and farm management, 2) use of medicinal plants, 3) milk quality control/certification and 4) a milk quality payment system. Given this context and the changes between the first and second exchange/year, a third research question will be added:

- c) To what extent are there any differences between 'first stage professionals' (farmers, vets) and 'second stage professionals' (production professionals, researchers, policy-makes) in success factors and barriers for success with regard to (mutual) learning in the context of the *Natural Livestock Farming/E-Motive antibiotic resistance project exchange*?

### *Development education*

As mentioned before, the initial focus of the E/motive evaluation studies (in year 1) was on perceptions of development cooperation. The main idea was that a new perspective on Southern knowledge and methods would bring about a change in the minds of Northerners partners: they would change their attitudes about global interdependencies and the effectiveness of development cooperation. In that first year of research, we discovered that studying this effect was complex. The concept proved hard to measure and participants in the projects in that year appeared to be subject to a ceiling effect; they were already quite aware of global interdependencies and had relatively positive attitudes towards development cooperation.

Although in this third year we didn't focus on development cooperation, it became clear during the research that there were some interesting 'side-effects' related to the attitudes towards development cooperation and awareness of global dependencies. We have therefore included the theme of development education in the results section.

The study was conducted between April 22 and May 2 2015.



## 2. METHODS

A mix of qualitative methods was used answer the research questions of this study. Insights into the learning processes were gained before, during and after the exchange visit in India. Joining the Dutch group visiting India enabled the researchers to actively observe and participate in the exchange activities. The participants actively contributed to this study: they participated in the interviews and were asked to write in a journal during the exchange. This chapter explains more in detail which methods were chosen to use and how they were executed.

### 2.1. Participant observation

The researchers participated in the exchange visit in India and also in additional activities in the Netherlands. During these activities, they introduced themselves as researchers of Kaleidos Research (part of NCDO Foundation). They explained their observations of people, organisation and processes during the activities. Also during the exchange itself they explicitly made clear that they were researchers investigating processes within the exchange. The researchers composed a topic list for observations before the activities, but room was left for taking note of unexpected events and personal experience of the activities. If possible, the researchers discussed and reflect on their observations at the end of each day during the exchange.

Overall, there were three parts of the project that the one or both researchers actively participated in:

- a. Two preparatory meetings in The Netherlands;
- b. The exchange itself; all activities as programmed by the TDU/DFE, including several interim meetings with all participants;
- c. A group meeting after the exchange with the Dutch participants and participants from the exchange in 2014.

A selection of photo's that were taken by researchers during the exchange are included in the report.

### 2.2. Interviews

As planned, interviews were conducted with all but one of the Dutch and African participants in the exchange in India. Two topic lists were composed for interviewing the participants, one for interviewing of the first stage professionals, veterinarians and farmers, and another one for second stage professionals such as trainers, employees of universities, research firms, milk factories and other industries (see appendix A for a joint version of the two lists). Nine of the participants were female and four of them male.

**Table 1** –Professional background of participants in the exchange-visit to India.

Role / background	#
Veterinarian	1
(medicine) Production professional	1
Animal scientist / policy & research professional	1
Farmer / Policy professional	2
Farmer / production professional	1
Research / Education	2
Veterinarian / Policy professional	2
Veterinarian / research professional	2

When possible, the researchers also tried to interview the Indian hosts during the various visits in the exchange. Due to an intensive programme (a lot of activities and meetings, meaning lots of travelling) it was hard to organise extensive interviews with these hosts and only parts of the topic list (composed for interviewing Indian hosts, see appendix A) were used asked to some of these Indians. However, it was considered to be important to also include their perspective on the exchange. Besides, time constraints, an additional barrier in interviewing some of these Indian hosts there was a language barrier due to little knowledge of English on their side. Finally, the quotes of the Dutch in this report were translated from Dutch to English by the authors of this report.

With regard to the organisation, the researchers talked to one of the principal members of the organising staff of the exchange in India. Additionally and when possible, parts of the item list were used to ask other Indian members of the organising team for their experiences and attitudes. Back in The Netherlands, we interviewed the Dutch co-organizer, a representative of Natural Livestock Farming.

### **2.3. Participant journals**

Learning processes may not all be visible for a researcher, even with all the methods at hand, such as observation and interviewing. Additionally, collected 'personal' stories from the participants, thereby contributing to our focus on storytelling. To get these personal perspectives, experiences and stories, small journals were handed out to all participants on the first day of the exchange in India. All participants were asked to write down their insights and thoughts in a journal during the exchange. Some examples were given by the researchers (advice to write down relevant thoughts, striking events and new insights), but on the whole there was a great deal of freedom in *what* to write in the journals, *when* to write, the *frequency* of writing and *how much* to write.

Six out of 12 participants decided to hand in their notes after the exchange. The journals varied in the length of the notes, the content (some notes were more 'personal' than others) and the way the notes were written (briefly or more extensively). All available journals were scanned for analysis and sent back to the participants. The results of the analysis are used to answer any of the three research questions and are visible throughout this report.

The journals have added value to this research. The notes add more personal perspective to the information that was collected in participant observation and the interviews. Also, it might have made the participants more aware of their role in the exchange, the possibilities to learn something during

the visits. And it might have made them more aware of their own thoughts and feelings during the exchange. To make the notes even more valuable, it might have helped to make and explain more strict 'rules' for the journals (what to write and what not). Some of the participants decided not to hand in their journals (which was voluntary) but that also means we are missing some information from this research method.

#### **2.4. What's app group data**

An additional source of data in this research is the information from the What's app group that included all Northern participants in the exchange. On April 20, 2015, the secretary of Natural Livestock Farming started this group. In the beginning, the main information shared in this group was information regarding traveling to India. During the exchange the app was used to share pictures and this happened also the first period after the exchange. Later the app was mainly used to share information about participants' initiatives on the topic of antibiotics reduction in dairy farming and media coverage about the project.

#### **2.5. Limitations**

Due to the program and extensive traveling within this exchange the researchers experience that they had less time than expected to collect the data for this study. During one of the introduction meetings of this exchange, the impression was given that there was no program or traveling in the evenings and it was even suggested to bring books, playing cards etc. to keep yourself busy during the evenings. Not only the researchers had little time to collect the data, also the participants were having trouble finding time to contribute to this study. Additionally, the contribution of the Indian partners, organisers and hosts, in this study was fewer than expected due to time constraints.

Because we want to use these results on mutual learning to advise the E-motive program in general, we have to be aware that this program, like most others, differs in actors, content, context and approach. However, we will be able to highlight some of the best practices in this exchange.



## 3. RESULTS: THE INTERVIEWS

In this chapter, we discuss the results of the evaluation of the E-Motive exchange visit to India by Ugandan, Ethiopian and Dutch professionals, as organised by the Natural Livestock Farming platform. Results will be discussed for every research question (mutual learning, sustainable learning relations and differences between professionals) and per method for data collection. Additionally, we report an unexpected but important result about development education.

### 3.1. Mutual learning

As formulated in the research questions, one of the aims of this research is to gain insight into the ways that this particular E-motive exchange facilitates *mutual* learning; learning by professionals from 'both' sides of the exchange. On the other side, there may also have been factors in the exchange that hinder these learning processes. In this paragraph, we describe our findings about mutual learning, based on interviews with the participants and staff, participant observation by the researchers, and the journal notes of the participants.

Since mutual learning is a process that involves two or more groups (but in this case two), the findings are presented in two parts. Firstly, we address the learning of the hosts; the Indian participants (3.1.1). Secondly, we will describe our findings regarding the learning of the visiting group: the Dutch, the Ethiopian and the Ugandan participants (3.1.2).

#### 3.1.1 Hosts: Indian participants

Perspectives from both sides are relevant for this question: did the Indian participants learn what they expected to learn during the visit of their peers in India? And did the Dutch, Ethiopians and Ugandan participants get the chance to share as much as they expected to during their visit? We will therefore use information from interviews with Indian and Dutch/Ethiopian/Ugandan participants. Due to time constraints and less possibilities for interviewing in the programme, the number of interviews with Indian participants was limited.

In the interviews, the participants answered a question on whether their expectations about learning were met during the exchange in India. Based on the answers from the participants and some of the members of the organising staff, we identified several factors influencing the learning processes within this exchange.

Regarding expectations of the Indians, the one participant that was interviewed admits pretty clearly that he expected to learn more during the encounter with the visiting group:

*"I expected two things about this visit. Firstly, I expected to learn more, and get new information, on the use of herbal medicine. Sort of an update on the training we had three years ago. This is what also was my main goal. (...) The first expectation was not fulfilled. We didn't get much new information or updates about the use of herbal medicine."*

When looking at the expectations about sharing knowledge among the visitors, most of the comments refer to the fact that this was something that was lacking in general. Reasons that are mentioned for not being able to share one's own expertise and experience are a lack of opportunities to share (time, programme), the feeling that the Indian peers were not interested in their specific knowledge (focus was on another subject or process) and the perception that important background information was missing to make the sharing more valuable. The following quotes illustrate these perceptions of the possibilities to share:

*"I am unsure of what they would want to learn from us"* [participant 02]

*"I didn't teach them much. But I am not a veterinarian, so I am not an equal peer for them."* [participant 07]

[In reflection session, red.] *"What can we bring back? Like to learn more about that."* [Participant 06]

*"I feel that it is a one-way process here. We are gathering a lot of knowledge, but I don't think we are sharing a lot with them. This is due to the design of the programme. In some of the meetings we've had I've noticed that there just isn't any room for that. One example is during a visit, next to a milking machine. They had a short story, we had the same, and we'll walk around a little. There is no opportunity to share real practical knowledge about dairy livestock keeping."* [participant 04]

*"It is difficult [to bring something, red.]. Communication is difficult. Possibilities are not always given. The farmers we met did ask a lot but were mostly interested in other farmers stories. This happens a lot, farmers are always more interested in the stories from a colleague than in the story from someone with another role or interest."* [Participant 01]

[after one of the meetings, red.] *"I liked the interaction with the farmers, important to talk to each other and not just listening. Looked at the programme of the symposium and we seem to have more time about prevention of diseases and the other things I missed so far."* [Participant 01]

*I've noticed that the people here (Indians, red.) are really in a 'bringing-mode'. And that is fine. We try to ask and bring something back. But I feel that this exchange and visit is also framed that way. We are here to learn about herbs. That makes the mutual learning a bit less. And also the group size makes mutual learning more difficult.* [participant 06]

Even though the majority of the answers about the Indian side of mutual learning appears to be negative, there were also some more positive remarks. And one participant mentions that he/she was not in India to bring something in the first place.

*"I've always believed that it is far better to listen first instead of starting off with your own enthusiastic story. (...) first, you'll have to build trust in the relationship, or at least make sure that there is an open atmosphere for sharing. I actually mainly came here to listen, that is most important to me."* [participant 09]

*"When I was coming here I thought that when I was talking about the indigenous breed, I would bring some experience from my community. And I was impressed that there are some farmers in India who are really focussed on keeping the indigenous breeds and conserving it. Conserving the indigenous breed is very important, and I thought I could share this with the people we are together with in this exchange. I think that the Indian community really believes in what I believe. We have the same level. We agreed that if we want to reduce the use of veterinary drugs, we have to keep our indigenous breeds".* [Participant 10]

This record of actual learning by Indians during the exchange is being supported by one of the Indian staff-members:

*"What I learned is that we learned from local breeds in Ethiopia and Uganda."*

### **3.1.2 Visitors: Dutch, Ethiopian and Ugandan participants**

This paragraph describes our findings on the learning of the visiting participants; the Dutch, Ethiopian and Ugandan. That means we'll include information on learning by the visiting group and information on sharing by the hosting participants. Our findings, based on the interviews and reflective sessions, are that there were several factors facilitating and hindering learning. The main factors of influence

are: (1) a sense of equality amongst the participants, (2) an extent of diversity in the group of participants, (3) a feeling of trust and openness, (4) the relevance of meetings, (5) the fit between the activities and contacts and the participant's profile and (6) additional factors related to the organisation and planning of the visit.

### *Equality*

A sense of equality was considered to be important to the learning experience for a substantial number of participants. First of all, it helped participants when they felt that their international counterpart had an equal feeling of urgency for the problems that the exchange addresses. From the participant observation we noticed that this feeling of urgency was not always apparent for all hosts in this exchange. However, participants mentioned that similar awareness of a common issue, when it occurred, was appreciated and helped sharing knowledge and experiences. For example:

*"When I was coming here I thought that when I was talking about the indigenous breed, I would bring some experience from my community. And I was impressed that there are some farmers in India who are really focussed on keeping the indigenous breeds and conserving it. I recognized their situation. Conserving the indigenous breed it very important, and I was happy I could share this with the people we are together with in this exchange."* [Participant 10]

*"This is really a learning opportunity. If we got an opportunity, other farmers from my country might come to India to learn the application of herbal medicine. Back home they can apply it on their cows."* [Participant 10]

*"Good to see that there was mutual interest from farmers and us. Very stimulating. Received very specific information. What I missed was an overview of numbers on success and failure. Appreciated experiences from farmers but missed some basic figures."* [participant 08]

The realisation that similar basic professional principles are also applied by the foreign professionals also facilitated the learning process. This helped creating trust and openness in the meetings, both important conditions for learning. For instance:

*"To me, treating each other in a 'fair' way is a very important condition for working together. And this is what I've seen here as well. There is respect for the producers and consumers pay a 'fair' price. I think that is a great thing and it makes me happy."* [Participant 09]

### *Group diversity*

Another aspect that influenced participants' learning experience was the composition of the group. In general, the diversity among the participants was perceived positively, as a facilitator for learning. Participants described two 'types' of diversity: (1) cultural diversity, the group was composed of people from Uganda, Ethiopia and The Netherlands, and (2) professional diversity, the group was composed of people from various professional backgrounds, such as famers, veterinarians, knowledge officers, policy makers, educationalists, scientists etc. Cultural diversity was associated with new perspectives, the sharing of experiences and practices and the 'fun' of working together. The following quotes illustrate the participants' positive images of cultural diversity in the group:

*"This is very valuable. The way that they look at things. [...]1 brings his perspective from a beautiful angle. And the way that [...] promotes her cows is something that we can really learn from."* [Participant 01]

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<sup>1</sup> The researchers removed participants' names from the quotes.

*"The Africans? I thought their presence was good. They were expressly present in a serious way. They had a positive influence on the learning process. They face the same issues as people have here in India and they are ahead in solving them."* [Participant 07]

*"I think that they are an enrichment to the group. The level of abstraction that the Ethiopians bring, as well as their experience to look beyond the situation in Ethiopia brings a new dimension to the discussion. Elisabeth also brings in a lot of practical experience that sometimes makes you reconsider your own knowledge. And the social aspect also makes it a lot more fun."* [Participant 03]

*"I think this exchange is very, very important. If I got a Dutch veterinarian coming to share what we are doing now with a Ugandan veterinarian, I am sure it would have a bigger impact than if it were a black talking to them."* [Participant 10]

Also, the professional diversity was perceived positively. One of the participants explicitly states that the composition of the group has enriched her professional network and that it will be relevant for sharing and the next steps back home:

*"It also brings nice informal interactions. [...] I know as a member of the Board of commissioners. Normally we wouldn't speak to each other regularly. The same goes for [...], he is not an obvious contact of mine. But here it becomes like a 'hotbed', that back in the Netherlands may lead to results that would normally be a lot more difficult to achieve within the formal setting of the sector. It provides a basis to continue cooperation in a later stadium. My network has had a serious boost. It also inspires me a lot to get to know the kind of people that tend to look beyond their own businesses."* [participant 03]

Besides the benefits of diversity within the group, some participants experienced difficulties too with this diversity. They had difficulties with English as the working language and the information overload as resulting from the diversity in cultural and professional backgrounds from the participants. The following quotes illustrate these problems:

*"For me, the extent of learning varied between the different meetings. The group (of participants, red.) had very diverse backgrounds, everyone is interested in different information."* [Participant 01]

*"On one side, it was really good that they (the Ugandan and Ethiopian participants) joined the group, on the other side less so. Because of them, the working language was English during the exchange, and they contributed with a lot of stories from Africa to. That brought a lot of new information to the discussions, while I thought I had enough to think about with only the information from India. But their participation did give us new and more perspectives."* [Participant 04]

*"I learnt a lot from the participants with different backgrounds, it gives me another perspective at my work, which is a good thing. But it does add up to an information overload."* [Participant 04]

### *Trust and openness*

Participants made remarks about the atmosphere of openness that was created by the hospitality and friendly attitudes of the Indian hosts and staff. They positively reflect on the willingness to share and learn they've experienced in a lot of the people they've met during the week. The following quotes illustrate this:

*"People are very hospitable. Even though you step in with a group of Western people. The willingness we experienced to share and to give. It was there every time. When you visit a village, everyone wants to see, hear and talk. Or at one of the meetings this week, when a farmer is full of enthusiasm and really wants to share" (knowledge officer animal health, the Netherlands)* [Participant 03]

But some of the participants also demonstrate an open attitude themselves:

*"I've always thought that one should be careful in communicating, that it will not just be a matter of 'sending', because that will create a certain atmosphere. It is much better to listen first than to start with an enthusiastic story that immediately determines your position. I think you should start by building a relation with trust, or at least a positive atmosphere for sharing. I am here primarily to listen. That is most important to me."* [Participant 09]

Another factor is trust in the knowledge level of the people that the participants meet in the exchange. Trust a crucial element in open sharing and peer learning and exchange. This means trust among participants in the group and trust between facilitators and participants. A substantial part of the group seems to experience this kind of trust, which is illustrated by the following quotes:

*"With this exchange, I came in contact with people that know a lot about the things we're dealing with (ethno veterinary medicine, red.). Back in the Netherlands it is very hard for me to judge who is an expert and who is not. Here you can be sure that these are renowned experts."* [Participant 01]

*"I think I that beforehand I thought they would know less about almost everything, except for their knowledge of herbs"* [Participant 04]

*"I believe that we are far behind regarding the knowledge level that they have here. I believe that using herbal extracts should be part of our management system."* [Participant 09]

*"I think that the Indian community really believes in what I believe. We have the same level."* [participant 10]

On the other hand (Dutch) participants have been critical about the knowledge level of their Indian counterparts:

*"I don't believe that culture is really a barrier to learning. But I do think that knowledge is. I believe that the educational level of Dutch farmers is on average higher than that of Indian farmers. Over here, people are working from day to day. In the Netherlands, farmers are used to thinking ahead. This is a management issue that we might be able to help each other with."* [Participant 09]

#### *Organisation and planning of the exchange*

Out of all participants, mainly the Dutch participants commented on the organisation of the exchange. These comments were two-sided. On the one hand, participants were positive about the effort that was put into the program. They reflect positive about the design of the program, the composition of the group and the relevance of the activities. On the other hand, there were comments about the intensity of the programme, the strict planning of activities, the setting of several meetings with local people and the selection of local people invited for those activities. The following quotes illustrate the positive reflection of participants on organisational matters:

*"The design of the program and the composition of the group is sublime."* [Participant 08]

*"Although the programme was very full, we had a really nice group and it was really fun!"* [participant 01]

*It was really wonderful, when [...] gave us a practical lesson, took us through the application of two medicines for mastitis and diarrhoea. I was really very happy because these are the two main issues that we have, even in my own herd.* [participant 10]

*"I think the Indian exchange is really well organised, because they have done the planning themselves. (...) So I think it is really positive to be in charge. That is why they were able to host us here, to work with other partners*

*and universities. I was overwhelmed, they are flying us to Chennai, to Kerala. Very excellent organisation. Being in charge is really important.” [participant 10]*

As we already stated, the comments were two-sided. Participants also shared some negative comments on the organisation of the event during the interviews, as the following examples show:

*“[red. suggestion?] Make two groups, so that people can choose where they want to go. Give room to choose one or the other (or neither) when you’re tired.” [participant 01]*

*“In one week, there is a lot of context information to absorb. And you need to have this knowledge before you can say something about adjustments. You have to know what you’re talking about before you can say anything useful about the situation.” [Participant 10]*

*“(red. about time constraints) Of course time can never be enough, so this is not a very special case. I think we were many, and we had many questions.” [Participant 10]*

*“First, you have to get used to the very different environment over here. After that, you’ll become ‘you’ again and there is more room for learning. It takes a while before you’re used to that.” [Participant 01]*

*“The flying really adds to the (work)load in the programme. That is a pity, because it was not clear what the purpose of those visits really was. If it were up to me, I wouldn’t have planned those visits so close to each other.” [Participant 01]*

*“It would have been nice if there was a bit more balance between physical comfort and workload of the program [...] I do not expect to stay in the Hilton, but I also did not expect to have blue feet” [Participant 08]*

### **3.2. Long-term learning relations**

In order, to be able to answer the research question formulated about the concept of long-term learning relations. We first have to research whether or not long-term learning relations are occurring among the participants of this exchange. In the interviews participants were asked if they were willing to continue working together on the reduction of the use of antibiotics in dairy farming (with Natural Livestock Farming). If they were willing to do so, we argue that this could result in long-term learning relations. Second, we asked participants what kind of course they want take part in in the near future. If they report of being interested in a course that is related to the topic of this exchange. We also argue that this could result in long-term learning relations.

Regarding our first question, all participants expressed a willingness to work together with DFE on the topic of antibiotics reduction. The following quotes show that the participants are not only willing to do so, but also already started working together:

*“For me, it doesn’t stop at this point, I already work together with Vecon, last year with the stuff for treating mastitis. I would like to continue working on this. I am thinking about how to do so.” [Participant 04]*

*“Yes, starting with this process by focusing in India on management and in the Netherlands focusing at local plants. We already made appointments and I will also join this project again when the people from India visit the Netherlands, I do not exactly know what is going to happen. I do like being involved. However, it has to become a bit more efficient, have to move on, we have to make progression. It looks like it is going to be a bit more concrete during the conference. I doubt if a lot of the participants really want to work on the process in the Netherlands.” [Participant 05]*

*“I have a business approach, I got my own company. I already work together with organizations in India regarding in vitro testing (animal hospital) and the analyses of heavy metals in natural resources (big laboratory in Chennai).*

*I already made appointments. Also, I am going to buy natural resources over her, however I am warned about the quality of the resources for export can be dubious, diluted with heavy metals. That's what I have learned over here and that is very valuable to me."* [Participant 07]

*"I told [...] I would feel very uncomfortable feeling if this stops this Sunday (red. the last day of the exchange) But I don't know what ideas [...] has or how to do this. But I think we should create a group of pioneers who write a vision on this idea. Enabling and encouraging new people to join the group. You cannot expect that all people will investigate a large amount of energy. But most people are willing to join temporarily. The fire should keep on burning."* [Participant 09]

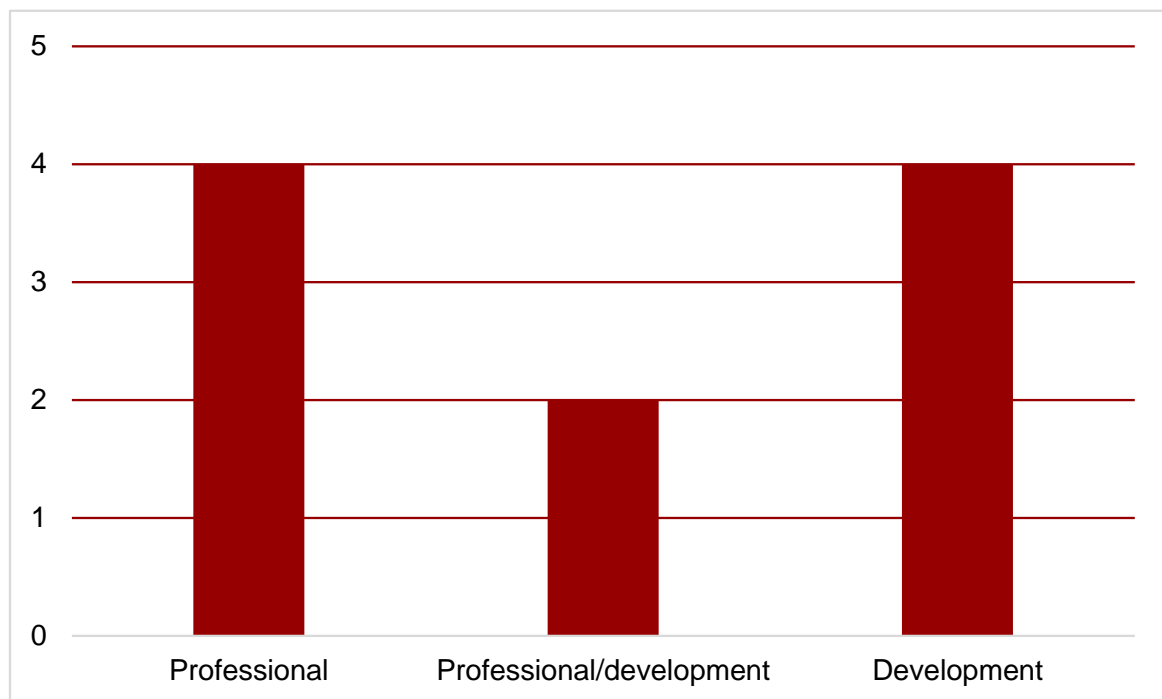
The quotes above not only show that, the participants plan or already work together in the field of the reduction of antibiotics in dairy farming, they also show that they differ in their motivation. Their motivations range from profit related decisions to a moral obligation to continue working on this topic. It is important to notice that the long-term learning relations are mostly among the Dutch participants and not so much between the Dutch participants and the Indian hosts.

We argue that willingness to work together is essential for long-term learning relations. The diversity in the motivations of participants shows that they have different reasons for staying involved in this project.

Another question in the questionnaire that provide us with insights into long-term learning relations is if participants want to invest in additional learning in (the use of herbals in) reducing antibiotics in dairy farming, by means of participating in a course on this topic. Almost half of the participants are planning to take part in this type of course. First and second stage professionals differ in this choice, veterinarians and farmers are way more likely to participate in this type of courses than second stage professionals.

### **3.3. Development education**

In this paragraph we describe whether or not development education took place. We did not include a research question about development education in this study. However, the findings based on the answers of respondents to the 'most significant change' question we decide to include this additional finding in this report. Based on the answers, a distinction can be made between three types of stories regarding most significant changes. Some of the participants just referred to an experience relating learning about their profession, others described an experience that relate to meeting and learning about the 'other'. This type of experiences focuses mostly on cultural or socio-economic differences between Indians and the Dutch. We consider this signs of the occurrence of development education. Additionally, some participants talked about both (see Figure 1).



**Figure 1** Types of education within the exchange (n=10).

First, we present some quotes of participants just talking about a development related issue:

*"Wherever I am, what I always really like is the happy open mindedness. People welcome you with open arms. You arrive with some fellow people from the West. The willingness to share and to give. If you compare this with our Western society, we look at foreigners and think mwoa. At the level of the poorest you notice a different attitude, but at the interaction level where we are at with the farmers and veterinarians you do notice this"*  
[Participant 03]

*"Chaos in India. Extreme differences compared with the Netherlands. It is my first time in Asia, maybe it feels less for others who have been over here more often"* [Participant 07]

*"Differences between the rich and the poor. Children are just staring at your camera and sharing pictures. Also the traffic was quite impressive"* [Participant 04]

Others referred to an experience that is related to their professional learning:

*"The visit to the milk station and the list of medicines in the animal hospital. There was medication on the list that we stopped using years ago in the Netherlands."* [Participant 02]

*"The realization that there is a future for herbal medication"* [Participant 11]

Seven out of nine answers on the most significant change question included a reference that could be to be considered development education. In other words, the majority of the participants experienced this type of learning. The main reason for clear references of learning about the other was whether or not participants travelled to countries like India before the exchange. Participants who travelled to similar countries were more likely to refer to professional learning than those who did not have this experience. The following answer of one of the participants underlines this:

*“What impressed me most is hard to say. I am not having a culture shock as many people have, I already been traveling to Eastern Europe or Asia considered it to be important to address some of the good things we witness here. I think they have created a very good system (it could use some improvements and they working on it) on the collection of the milk among the little farmers, to central point of collection at a milk station were the milk is collected in a cooling tank, and being cooled. And that they pay a fair price (for the milk, red.) to the farmers. The milk factory we visited pays similar prices as is in the Netherlands.” [Participant 09]*

We argue that in order for exchanges within the E-motive program to have a bigger impact regarding development education the background of the participants seems to be essential. In an earlier report, we already refer to a ‘ceiling effect’, participants within that exchange were already scoring so high on questions on this topic. In that case the effects of development education are much lower than if participants have less experience with meeting the other.

### **3.4. Differences between types of professionals**

Earlier in this report we made a distinction between first stage professionals and second stage professionals. First stage professionals work directly with the animals, such as farmers and veterinarians. Second stage professionals may not work directly with the animals, but work on a more general level on antibiotics reduction in dairy farming, such as (associate) professors, people from the animal food industry, scientists etc.

#### **3.1.3 Differences in mutual learning**

As we argued before, the diversity in the group was one of the things that was experienced by participants as a driver for learning. Others were trust and openness, extent of preparation, etc. There is some variation among the participants regarding the extent that participants experienced these factors as crucial in their learning process. Some have been influenced more by the intensity of the programme and the experience of being in another culture, whilst the learning experience of others was influenced more by the relevance of certain visits and the interaction with the Indian hosts. Even though, the information in the interviews does not give reason to expect that differences in sharing and in learning are along professional lines. What became clear, is that for instance relevance of contacts (meeting peers) and of meetings is a driver for mutual learning for every participant involved, regardless of their professional background.

#### **3.1.4 Differences in long-term learning**

The results do not show any differences in willingness to continue working on the topic of the reduction of antibiotics in dairy farming in the future. However, first and second stage professionals do differ in their choice of courses. Veterinarians and farmers are way more likely to participate in courses related to the topic of this exchange than second stage professionals.

#### **3.1.5 Differences in development education**

There are no differences between first – and second stage professionals with regard to the occurrence of elements of development education. Out of 3 participants who described an experience of professional learning, 2 were second stage professionals and 1 was a first stage professional. The participants who mentioned both were both second stage professionals and the four persons only referring to development education related issues half of them were first stage professionals and the other 2 were second stage professionals.



## 4. RESULTS: PARTICIPANT OBSERVATION & WHATSAPP

### 4.1. Mutual learning

As researchers, we've observed several things with regard to this **Indian side of the mutual learning**; the extent of 'learning by Indian participants' and the extent of 'sharing by visiting participants'.

- We noticed that part of the Dutch participant group was, before going to India, not very eager to share or sure of what to 'bring' to the Indian participants. In one of the preparatory sessions, participants had to share what they expected to bring during the exchange, in terms of knowledge or experience. For a bigger part of the group, this proved a difficult question. Compared to the question about what 'they wanted to learn during the exchange' the participants seemed to have difficulties in answering. We also noticed that before and during the first day of the exchange, participants were sometimes referring to the exchange as it feeling like a school trip. This indicates that participants were not (all) focussed on what they could bring and had to offer, both more on what they were about to see and learn
- In a majority of the meetings, there is not much room for discussion between visitors and hosts. The Indian hosts and staff are very keen on sharing their own knowledge. This was already mentioned in the interviews. But when – in a few meetings and activities – the time is available to discuss things, it instantly seems to work. We've seen a few meetings where a lot of interaction happened. Because of all the different backgrounds of participants, the discussion is very relevant and in depth. In another visit (to a farm) there is also room to share and exchange. Farmers meet farmers. We notice that meeting peers is really a driver for an interactive discussion. When the visit is relevant, it resembles or relates to your own (professional) situation, learning and exchange is facilitated. What also helped, was the very hospitable farmers (open attitude) and their good command of English. Having said that, the main observation is still that the opportunity for such interactive discussions is lacking.
- Another relevant observation is during a visit to a milk company. In a meeting, there is a lot of exchange and interaction between the visitors and the hosts. Questions are thoroughly addressed and answered by both sides of the conversation. The visitors are asked to provide input on the situation in their respective countries. It is striking that the Dutch visitors seem reluctant to give this information. Only after further urging by the Indian hosts, one of the Dutch participants shares some numbers. We believe that the observed hesitation is not so much a matter of unwillingness to share, but probably more a consequence of poor preparation. Were participants informed of what was expected from them during the visit? Had they framed the visit more as an exchange and less as a learning activity, they might have been better prepared.

We also observed several things with regard to mutual learning during the exchange by **the visiting group** (so what have they learned in India, what did the Indians feel they could share), as well as during preparatory meetings beforehand and evaluation session after the exchange. To sum up, we identified that both factors before the exchange (selection of participants, group diversity, preparation) and factors during the exchange (guidance in a new environment, participant reflection) were influencers of learning among participants.

- One factor of influence we identified was the diversity in the participants group. Firstly the diversity within the Dutch group. Since almost all came from different (professional) backgrounds and had their own expertise related to dairy farming, the discussions during, but also after visits and activities, were lively. This appeared to stimulate the participants to 'think outside the box'; not only to see the Indian perspective, but also to realise that there are different roles and perspectives within the Dutch group. Group diversity was thus perceived by us as researchers as a positive influencer of learning.
- Another factor that seemed to influence mutual learning was the level of preparation for the programme that was organised. Although several preparatory meetings were held when still in the Netherlands, we noticed that it would have benefitted the participants learning experience to have a bit more contextual knowledge about dairy farming in India before actually visiting India. They felt they had to spend a lot of time getting to know the context when already being in the exchange. And they admitted to have felt less confident in sharing their own advice in encounters with peers in India. A more detailed preparation on the practical level (which facilities are available etc.) would have made the learning slightly easier. Simply because the practicalities now seemed to take up too much of participants energy. A lack of preparation (both in terms of contextual knowledge and practicalities) was thus experienced as a barrier to learning.
- Related to the preparation, but maybe a bit less strong of an influencer, was the level of guidance for participants during the exchange. The participant group was bigger and more diverse than the year before. That made it difficult for the organising staff to cater to the needs of all the different participants. As a consequence, participants were sometimes unsure of organisational matters and unaware of the persons they were about to meet, the kind of place they were about to visit etc. A little more and a little more structured guidance or assistance might have improved the learning experience.

During the exchange days, there were several occasions on which participants gathered to discuss the programme and their experiences and findings so far. We noticed that these meetings seemed to help in bringing awareness about their own learning to the participants. The meetings forced participants to think about their role in the group, as well as the role of the other participants and organising staff. Also, by addressing these issues within the group, the participants had another chance to learn from each other. The importance of reflection, both individually and as a group, became very clear.

#### **4.2. Long-term learning relations**

Back in the Netherlands, several evaluation and follow-up meetings were organised to look back at the exchange and to plan further activities in the field of reducing antibiotics. Observational data on the enthusiasm of exchange-participants to be involved in these meetings and in follow-up activities, as well as the information that was shared during the meetings gives us information on the sustainability of learning.

- All nine Dutch participants are involved in at least one of the follow-up meetings. Most attend at least one of the meetings. A few don't attend all meetings (or none) because of personal restrictions, but are actively involved via e-mail or phone. The sessions are held at one of the participants house / company, which shows commitment to the group and process.
- Almost all participants have very concrete ideas on how to put their newly acquired knowledge and ideas into practice and projects in the Netherlands.

Only one of the participants is not sure yet on how to translate the acquired knowledge to the Dutch situation, or how to implement this in day-to-day work. This participant mentioned in the evaluation session to have felt overwhelmed by the experience of the exchange. Even though this participants experience may have led to mutual learning of professional knowledge less than with others, the participant appears to have learned a lot from the culture clash, so with regard to development education.

*"For the last few weeks, I've felt occupied by my day-to-day work. Mostly, my mind has been on how to solve problems we saw there, instead of how we can implement things here in the Netherlands."* [participant 02]

- There are other observations that tell us that the participants are very willing to continue their involvement with reducing antibiotics through Natural Livestock Farming, and thus may continue learning. All participants agree to form smaller groups among each other to work on different sub-themes, such as communication, herbal experiments, commercialisation etc. In the first evaluator session, concrete deadlines are set and smaller groups are formed that will work on these specific issues.
- An interesting observation on learning is that sometimes the actual knowledge in the exchange has not been the main motivator, but moreover the experience and the group process have been a driver for involvement, which is illustrated by the following quotes:

*"I am inspired but I don't see myself working with a blender at my practice now. I am thinking about other ways to handling the issue here and have been talking to colleagues"* [participant 01]

A last observation that supports our opinion that long term learning is happening in this project and after the exchange, is with regard to the follow-up exchange: the visit to the Netherlands by Indian, Ethiopian and Ugandan participants. All participants (except one due to personal issues) have been actively involved in the facilitation of this exchange. They've guided one or more days with the foreign group (visited farms, institutes and companies) and were actively participating in the one-day symposium organised in Zwolle.

#### **4.3. What's app group data**

The creation of a so-called 'what's app' group also facilitated possibilities for long-term learning relations to take place. After the exchange, initiatives of the participants and media coverage of this project were shared amongst the participants.

Finally, we argue that the urgency of the problem also add to sustainable learning relations. Participants share this feeling of urgency in this group app and this became very clear when media coverage or a new initiative of one of the participants was shared in the group app.

The following quote shows the sharing of initiatives:

*"Hi [...], the herbal knowledge group at 19.30 will be held, the option for a herbal group on growing calves at 18.00 is cancelled. We are looking for a new date for this".* [Participant 09]

The following quote shows the sharing of media coverage:

*"Oregano should bring in more money- Nieuwe Oogst.nu (a website on farming, red.)"* [Participant 04]



## 5. CONCLUSIONS

In chapter 3 and 4, the results of the evaluation are described. Given the large amount of information that was gathered during the research, we've used data-triangulation to draw conclusions. In this chapter, we will look again at the research questions, and formulate conclusions and answers to those questions.

### 3.2 Mutual learning

The first research question for this evaluation study considered the identification of barriers and drivers to mutual learning within the exchange visit. This resulted in the research question:

*What factors can be distinguished in the context of the Dutch Farm Experience/E-Motive antibiotic resistance project exchange that either facilitate mutual learning (good practices) or are a barrier to mutual learning (lessons learnt)?*

Based on information that was gathered during interviews, from participant journals and through participant observation by the researchers, we can conclude that learning did occur during the exchange and after, but that mutual learning at the same time only happened occasionally and sporadically. Barriers to mutual learning were:

- Time
- Framing of the exchange and expectations about the exchange among participants
- A variety of interests by all those involved

The results show that (one sided) learning did happen. Identified drivers of learning within this exchange were:

- A sense of equality among all participants
- A certain extent of group diversity and careful selection of participants
- Feelings of trust and openness among participants and in the participant-staff relation
- A certain experience of 'culture clash' within the exchange
- Moments of reflection, as a group and individually
- Time reserved for relevant exchange in meetings and matching of relevant contacts (peer matching)

On the other hand, we've identified four factors that hindered learning in the exchange. They are:

- Perceived relevance of meetings, contacts and activities
- Group size and diversity
- A perceived lack of organisation, more specific insufficient preparation before the exchange and lack of guidance during the exchange
- A lack of time (in relation to planned number of activities)

### 3.3 Long-term learning relations

What factors can be distinguished in the context of the *Dutch Farm Experience/E-Motive antibiotic resistance project* exchange that either facilitate long-term (learning) relations between professionals involved or are a barrier to these long term (learning) relations between professionals?

Our results show that learn-term learning relations were established during the exchange. However, the relations were almost exclusively established among the Dutch participants in the exchange. It

seems a bit like a waste that we could not identify clear long-term learning relations between the Dutch participants and the Indian hosts.

The following factors were identified that facilitated the long-term learning relations among the Dutch:

- The composition of a diverse group of participants who are already involved in the topic of the exchange in the Netherlands.
- The facilitating of meetings in the Netherlands with the participants after the exchange.
- Tangible agreements with the participants in follow-up initiatives.
- Online group in which participants can interact on the topic.

### **3.4 Differences between professionals**

We found no clear differences when it comes to learning between first stage professionals (farmers and veterinarians) and second stage professionals (researchers, educational professionals, etc.). Altogether, the data tells us there is no difference in mutual learning, willingness to continue working on the topic of antibiotic reduction or with regard to learning about development cooperation.

### **3.5 Development education**

An unexpected outcome of this study regards development education. The initial idea behind E-motive was that taking part in a peer-to-peer learning exchange from people of the global North will influence their ideas about the global South. We have found evidence, in contrast with earlier studies in which we researched the effect of this on people in the North in exchanges in the Netherlands in which they met peers from the South, that this type of education took place among the majority of the participants in this exchange.

An essential part of this education to take place was the background of the participants. Clearly, participants who had non or little experience in traveling to the global South were more likely to be show and express signs of learning about development.

## 6. RECOMMENDATIONS

From the conclusions, we hereby formulate five recommendations for organising an exchange that aims to stimulate mutual learning among professionals.

1. **Balance participant selection and peer to peer learning opportunities.** In the selection of participants, try to find a balance in group diversity and the programme. A certain extent of group diversity appears to be positive for the dynamics during reflection sessions and for learning in general. But in order to maximize peer to peer learning, each 'type' of participant needs to be matched to a real peer during the exchange. Take care of North – South matching of peers on the different activities in the programme. Matching should take form of meeting, exchanging experience and knowledge and having time for (informal) discussion and interaction. Within exchanges that last a week, there is limited possibility to cater to the need of too many types of participants.
2. Related to recommendation 1, provide **fitting and relevant exchange options for all participants.** Adjust the programme, the activities, the peers they are to meet, to the different 'types' of people that participate in the exchange. Use designs such as optional parallel activities or careful selection of peers to cater different participants at the same time.
3. Build in **preparatory sessions, reflective sessions during the exchange and follow-up sessions** after the exchange. Ask participants not only to write or present their expectations about learning and bringing, but take time to reflect on those individual expectations in the group. Make sure individual roles and expectations are clear (not necessarily true) to all participants before the actual exchange. Think of creative forms of 'getting to know one another'. Work with methods such as 'outcome mapping' to actively involve participants in the goals and subject of the programme and the actual trip (framing).
4. Create an **environment that enables long-term learning.** We argue that the role of the organizer of the exchange in creating this environment is essential. The organizer is the linking pin between the stakeholders and participants. If relations between the stakeholders and participants are established, the role of the organizer becomes less important. Keep in mind to involve all participants, thus from the global North and global South.
5. Cherish a **certain extent of 'culture clash'.** Make sure that participants are formally and carefully equipped for what they're about to see and do in the country of visit, but cherish the part of the learning experience that is a consequence of experiencing a new culture, a different environment etc.

# APPENDIX A TOPIC LISTS

## A. Topic list participants / professionals

1. Expectations before the exchange  
(reflect on expectations that were formulated before the exchange)
2. Specific expectations: what expectations did you have regarding the knowledge of the Indian peers (farmers and vets) on the use of antibiotics and the related problems? What is your opinion on that now?
3. When formulating your expectations, you mentioned you wanted to learn the following during the exchange (researcher mentions learning needs). What happened? Did you get a chance to learn these things? (researcher note: ask for reasons: drivers of learning and barriers). Do you think you will implement the things you've learned into your day-to-day work?
4. When formulating your expectations, you mentioned you wanted to bring the following during the exchange (researcher mentions needs). What happened? Did you get a chance to bring these things? (researcher note: ask for reasons: drivers of learning and barriers).
5. Can you tell me about the encounter, occasion or activity that has impressed you most during the exchange so far? Why? (researcher note: try to reflect on professional activities, but leave room for personal comments)
6. What is, according to you, currently the most important problem in the Dutch/Ethiopian/Ugandan dairy sector? (researcher note: reflect on global solutions for global problems)
7. If you could choose to start a course of professional training at this moment, what kind of course or training would you prefer?
8. Could you tell me something about your first encounter with (problems of) antibiotic use?
9. Are you prepared or planning to work together with NLF and TDU in the near future to contribute to the reduction of antibiotics in the dairy sector? (researcher note: why, why not, what plans etc.)
10. What is your overall impression of this exchange? Is it positive or negative? Why? (researcher note: ask for examples and explanation)
11. If you were to contribute to the organisation of next year's exchange, what would you like to change? Why?

## B. Topic list participants / first stage professionals (farmers/vets) - Indian

1. (if participant was prepared for visit) What were your expectations about the visit of your Dutch colleagues?
2. What is the one most important thing you really wanted to tell the Dutch visitors? Why? (explanations, ask for examples) Did you share this knowledge? (ask for barriers, was there enough time in the meeting, was the language a problem, the cultural context or communication?)
3. Could you tell me what your main impression of this visit was? Positive or negative? Why (explanations, ask for examples!)
4. What is, in your opinion, the most important problem in dairy farming in India nowadays? Do you think that this problem can be solved in a better way when working together with farmers worldwide? (ask why/why not, who would be the alternative actor to solve the problem, what would be needed, etc.)
5. If you would be offered any training/course related to your farm/clinic, what would be the most urgent/important thing that you would like to learn about?
6. If you could organize the next exchange/visit, would you change anything? If yes, what? If no, why not?
7. Are you willing or planning to work more on the topic of antibiotic resistance together with the TDU and the Dutch colleagues? (ask how, why, when etc.)