

The Civil Society Fund

FINAL REPORT

CITIZEN PARTICIPATION INTERVENTIONS

The total report must not exceed 6 pages, plus the cover page.

PURPOSE

The final report is the Danish organisation's report to the Civil Society Fund. Your reflections are important for documentation and learning. Accordingly, the local partner is not supposed to draw up this document on its own.

The final report can be used as a tool in your partnership to enhance transparency and joint responsibility as described in "Position Paper No. 4: Partnership and strengthening of civil society".

The final report is also added to the Danish organisation's track record, and will be taken into account in future assessments of applications from the Danish organisation involving the same or other partners in line with the Guidelines for the Civil Society Fund.

CISU aims to send feedback on the report to the Danish organisation no later than two months after reception.

| Danish applicant organisation | DIB | | |
|---|---|--------------------|-------------|
| Intervention title | A participatory and cross-sectorial pilot project to prepare networks and capacities for control of diseases spreading between animals and humans in rural Bolivian Amazon communities (NETCAP-DIB) | | |
| Contact person's name and email address | Helle Ager Henriksen / bolivia@dib.dk | | |
| Reference number | 17-2127-MI-okt | | |
| Country(-ies) | Bolivia | | |
| Project period | 8/1-2018 - 31/1-2019 | | |
| Total budget | 399.995DKK | Actual expenditure | 398.432 DKK |

| 29.07. 2019 | Clarafi | |
|---------------|--|--|
| Date | Person responsible (signature) | |
| | CLARA LUCIA TONNISEN | |
| dib@dib.dk | | |
| Email address | Person responsible (name in block letters) | |



1. Objectives and outputs achieved

1.1. Describe the extent to which the intervention has achieved the objective(s) originally set out in the application.

Achievement of objectives in percentages on a scale from 0-100%. (100% is awarded if the objective has been completely met, and 0% if no part of the objective has been fulfilled)

| Achievement of Objective 1 | 95% |
|----------------------------|-----|
| Achievement of Objective 2 | 88% |
| Achievement of Objective 3 | 95% |

The target group in accordance with section 3 in the original application.

| Estimated number of persons in the primary target group affected by the intervention | 418 |
|--|-------|
| Estimated number of persons in the secondary target group involved in the intervention | 3.000 |

This quantitative data is used for CISU's cross-cutting monitoring.

1.2. Reflect on the planned intervention activities and assess the extent to which these have led to the outputs and changes originally set out in the application.

The intervention's main objective was to improve the livelihood of indigenous communities in the Bolivian Amazon by raising awareness and building local networks and capacities to prevent and combat diseases that spread between animals and humans. To do so, our aim was to focus on a single zoonotic disease. Leptospirosis, which we suspected was present and underdiagnosed in the working region. constituting a serious threat for the health of people and animals, and their productivity. Research activities were carried out in domestic animals and human populations in two villages in coordination with local and regional animal and human health workers and in collaboration with partners from the academia sector. Scientific evidence showed an alarmingly high occurrence of clinical symptoms and Leptospira bacteria in samples from the local human populations and domestic animals. In addition, circulation of two other serious diseases was documented: the zoonotic disease, Hantavirus, and the blood parasite, Babesia spp., which causes disease and death in cattle and lead to economic losses for local cattle producers. The dissemination of the research results and their participatory discussions with different stakeholders such as communards, animal holders, local authorities from municipalities and indigenous organizations, human and animal health providers - both at the local regional and national services - allowed for raising awareness in different sectors and created a common learning context making it possible to implement new diagnostic approaches, treatments and control interventions by the health providers. The new generated network also allowed us to discuss and identify locally adapted strategies to reduce the risk of Leptospirosis and Hantavirus transmission and dissemination, while generating human capacities to suspect, treat and control Leptospirosis.

2. Partnership and citizen participation

2.1 Reflect on how the intervention has strengthened your partnership and created mutual gains for participant partners. You are welcome to provide specific examples.

The intervention allowed Teko Kavi (TK) to expand its working activities to focus on health problems in Bolivia while extending its collaboration network with national, regional and local health authorities, animal and human health services and local populations in the San Buenaventura municipality. The collaboration established between TK and the Danish universities; University of Copenhagen (UCPH) and Technical University of Denmark (DTU) were of great benefit not only for TK, who increased its knowledge and skills on the construction of One Health interventions and One Health evaluations, but

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also benefited the local partners (mainly SENASAG and academia partners) through conferences given by UCPH expert PhD Liza Rosenbaum Nielsen in Bolivia. Both UCPH and DTU profited by gaining knowledge of the challenges of improving health through citizen and stakeholder participation in areas where economic interests and politics influence attempt to reduce disease occurrence.

The Danish partner organization, DIB, gained considerable knowledge of the One Health approach for combating health problems as well as coordinating a health project in collaboration with the academia (UCPH/DTU) and a local partner (TK). This specific kind of partnership secured not only an extension of DIBs organizational and personal capacities, but also allowed for a fruitful exchange of experiences and areas of expertise (e.g. working with civil societal capacity building and advocacy vs. collecting samples and elaborating preventive health strategies) for the benefit of the implementation of project activities, and serving as a foundation for future health related collaborations between DIB, TK, UCPH and DTU.

The inclusion of community members, local authorities and health service providers during the intervention activities, and especially in the participatory discussions of the laboratory results, made it possible to generate a common understanding of health problems between the essential stakeholders but also allowed local representatives to listen to the needs and demands of communards to improve public health, animal health and production conditions. This resulted in local demands to the San Buenaventura municipality and even the Health minister to provide resources aiming to reduce the detected health treats.

Finally, having partners from the academia sector involved in the intervention made it possible to increase the number of tested diseases on the collected samples (i.e. IINSAD ran additional laboratory tests to detect Leishmania, Malaria, Cysticercosis on the collected human samples. Fortunately, none of these diseases was detected). Additionally, the promoted inter-institutional work allowed to build up and strengthen communication and collaboration channels between regional and national health providers and academia. As a result, IINSAD is now being considered by the La Paz health service (SEDES LP) as key collaborators for interventions on Leishmania and Malaria at the regional level, while La Paz veterinary service (SENASAG LP) is also implementing collaboration agreements with IINSAD and IITCUP to improve the diagnostic capacities for zoonotic diseases in domestic animals. These were unanticipated positive results of the intervention.

2.2 Describe how the intervention has fostered citizen participation, volunteering and/or civil organisation in the countries of cooperation as well as in Denmark. You are welcome to provide specific examples.

Due to the interest in getting health information on their animals, community members were willing to collaborate during domestic animal sampling, and even providing local transportation of the sampling team. Once the lab results were available many animal owners requested to learn about the detected diseases affecting their domestic animals. Thus, two workshops were organized.

At the local level, the generated health awareness made the communal authorities from Tumupasa and Buena Vista include health aspects on their monthly communal meeting (March 2019). During both meetings and after explaining and distributing the Leptospirosis and Hantavirus generated leaflets, communards and their authorities defined the realization of regular communal activities aiming to reduce the risk of rodent-borne diseases transmission (i.e. clearing of community areas where rodents could proliferate; elimination of sources of stagnant water were Leptospira bacteria could survive). In both communities, the 1st self-organized communal cleaning campaign took place in April 2019. Additionally, by generating and sharing lab results, the intervention increased the interest and demand for health information by community members, local health providers and authorities, and promoted a demand to the local authorities to coordinate with local health centres to implement actions aiming to reduce the diseases risk transmission. Authorities from the Tumupasa and San Buenaventura municipalities used the NETCAP technical report to request support from the regional and national health services (SEDES LP and MS) to control rodent populations in the area. Also, and due to the close connexion between rodent-borne diseases and sugar cane production, the SBV municipality shared the report and the generated diffusion material (Leptospirosis and Hantavirus leaflets) with the SBV sugar mill responsible, sugar cane producers and well as the national sugar cane research centre (INIAF) so that support and mitigation measures can be considered in the sugar cane production area.



The intervention opened up for the opportunity to share the human blood samples collected to detect Leptospirosis to test other diseases of interest for other groups (Hantavirus – of interest for regular surveillance activities of the Rodent-Borne Diseases Program from the MS and SEDES LP - , Leishmania, Malaria and Cysticercosis – of interest for IINSAD and SEDES LP) and this fostered the participation of research groups from academia and gave them the opportunity to start a collaboration with health authorities from SEDES LP. The established collaborations allowed us to test 5 different diseases with almost the same amount of money designated by NETCAP-DIB to test only Leptospirosis.

Finally, the project led to a new corporation being created between DIB and the two universities in Denmark (UCPH/DTU). This is a new type of partnership that was perceived as highly rewarding for all three partners, and the project has spiked new interest in participatory projects with research and capacity building elements within One Health.

3. Challenges and adjustments

3.1 Describe the greatest challenges faced in relation to implementing the intervention. These may concern, for instance, how the context has changed or how the potential risks set out in the original application have evolved.

Rainy season was an important challenge for the development of some field activities causing some delays, as well as the irregular support obtained by the Buena Vista communal authority, whose little interest on the community activities impeded the realization of two workshops in the community. Fortunately, the new communal authority elected in December 2018 was more proactive and allowed us to complete the intervention's activities.

One of the problems faced during the human sampling activities was the last-minute absence of the SEDES LP team (due to an administrative urgency) who was supposed to collect the human blood samples. Fortunately, the collaboration established with doctors from IINSAD and the support obtained by a local nurse allowed us to solve the situation and obtain all the established samples while training the Tumupasa local nurse on blood samples conservation methods.

Economic and structural problems at the SBV municipality caused an unstable labour situation for the hospital lab responsible, thus the objective of implementing local laboratory capacities to detect Leptospirosis at the SBV hospital could not be achieved. Nevertheless, the situation was solved by sending the samples to the CENETROP lab, which is the MS official lab.

3.2 Describe the changes, if any, and corresponding adjustments in the intervention process and activities.

The objective of implementing local diagnostic capacities to detect Leptospirosis could not be achieved. Thus, all serologic tests were done at the national reference laboratory (CENETROP) with the benefit of having the NETCAP lab results included as part of the official national epidemiologic reports. In addition, it was not possible to carry out a capacity building workshop at the organizational level (with DIB and TK representatives) during a project visit from DIB, since the visit was cancelled due to unforeseen health conditions. Instead, the allocated funds were spent on local salaries and the participation in the International Meeting for Emerging Diseases (IMED) in Austria, which presented NETCAP-DIBs local project coordinator with great networking possibilities and secured an international diffusion of the results obtained during the intervention.

4. Monitoring and learning

4.1 How have experiences been gathered and systematised in the course and at the end of the intervention?

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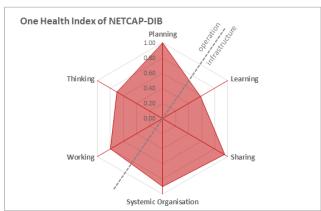


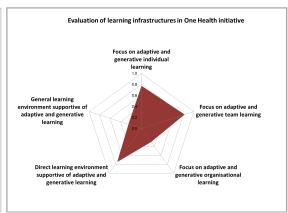
All methodologies used and the lab results obtained from domestic animals and human samplings activities carried out in the communities were systematized in a technical report ("Informe técnico de monitoreo de enfermedades en las comunidades de Buena Vista y Tumupasa, TCO Tacana I") which, after realizing the local information meetings, was distributed among local authorities, regional and national human and animal health authorities, as well as among our academy partners. In the same way, the applied methodology and results of the participatory workshops carried out to elaborate a Leptospirosis prevention strategy, were presented in a document ("Estrategia de prevención y control de Leptpospirosis en comunidades de la TCO Tacana I, provincial Abel Iturralde del norte de La Paz") and distributed among our partners and representatives of the different stakeholders related with the topic. The main elements from the elaborated prevention and control strategy, plus information on how to recognize Leptospirosis and Hantavirus diseases, were included in two leaflets (one per disease) with 3000 copies/leaflet being distributed among members of the Tumupasa and Buena Vista communities, members of neighbouring non-Tacana communities from the San Buenaventura municipality, inhabitants of another 17 Tacana communities, plus inhabitants from other at-risk communities belonging to other municipalities from the North of La Paz department. Digital versions of both leaflets were shared by the responsible for Productive Development of the San Buenaventura municipality with representatives of the 6 associations and the federation of sugar-cane producers from the municipality as a mean to disseminate the information among highly-at-risk populations.

In a more academic setting, an abstract summarizing the partial results of the NETCAP-DIB initiative was present at the International Meeting for Emerging Diseases (IMED) that took place in Austria in November 2018. The work "Zoonotic diseases in the Bolivian Amazon: Initial alarming results from a One Health initiative" whose authorship included members of TK, IINSAD, IITCUP, SEDES LP, SENASAG LP and UCPH, was presented by the NETCAP-DIB coordinator in Vienna and the abstract was included in the IMED 2018 memories.

The One Health evaluation, carried out by Liza Rosenbaum Nielsen from UCPH-DK after the project was finalised, demonstrated that NETCAP-DIB had a high level of 'One Health-ness' (66 points out of 100 possible, which is higher than many previously evaluated One Health initiatives). This evaluates the thinking behind the project as well as the planning and working stages of the project. These are supported by infrastructures that were also evaluated both qualitatively and quantitatively (available as an Excel-file with scores, comments and graphics to illustrate strengths and weaknesses in the project). The summary measures are illustrated in the left figure below. The element that the project scored lowest on was the learning infrastructure and this was mainly due to an inability of the initiative to affect the general learning environment and throughout organisational structures – for instance higher leadership levels in public health and governance structures and politics that could affect the decision making about river dam constructions, building of sugar mills, forest cut-downs etc. (right figure).

The 'OH thinking element' did not reach top scores, because the environmental aspects were only included to a minor extent and because the time and socio-economic dimensions could not be addressed sufficiently with this pilot project. Overall, there was a good balance between operations and infrastructures in the project and the role of the NGO Teko Kavi as local partner was evaluated to work well and promote the One Health approach.







4.2 Which tools have been used for monitoring and/or capacity building, if any? (Mark with a cross in the table below)

| Mango Health Check? | Х |
|---------------------------------|---|
| Accountability Dialogue Tool? | |
| Other tools? If so, which ones? | Х |

This question is asked for the purposes of CISU's monitoring, and should not be perceived as a requirement to use the tools.

For financial control, the mango system is used as well as the double accounting system in a software that is audited every year by the National Tax Service of the Bolivian State.

4.3 Describe the most significant lessons that you have learned and experiences that you have gained by implementing the intervention.

The generation and use of scientific health data in a country and region where little epidemiologic information is available due to limited or inexistent government resources available for research, was an important measure to visualize un-diagnosed health problems. Involving local communities and authorities during the sampling activities and the joint analysis of the obtained data, proved to be an important step towards generating awareness and collaborations between different stakeholders to find solutions and reduce the identified health threats. The use of inclusive and participatory research and solution-identification strategies considerably increased the chances of involving civil society and having incidence to improve the health situation in their household, communities and regions.

As expected, the application of a multidisciplinary and intersectorial approach – the One Health approach – to improve the health situation in the working area proved to be of great benefit for the different stakeholders taking part of the initiative. The inclusion of academia partners to validate the obtained scientific data and to approach universities with health servers and local communities was an important step to promote sustainability of the collaborations and activities promoted.

Finally, the initiative showed us the importance of using diplomacy skills when dealing with different stakeholders, whose visions or interests may differ or even be opposite (for instance, authorities from different politic parties, or sectors promoting intensive agriculture vs health services having to deal with health problems caused by intensive agriculture). Luckily, health was a topic that allowed us to gather different sectors and visions to join and collaborate for a common benefit.

For the university professors from both Denmark and La Paz, it was a great learning experience to participate in the field work to learn about practical aspects and issues that may arise in the field during collection of data and samples for research. It was also useful to be able to apply the 'NEOH tool for evaluation of One Health' to the project after it was finalised, based on the visit to Bolivia. The project set-up created very good opportunities to interact with a wide range of disciplines and sectors facilitated well by an independent NGO (TK).

4.4 How will these lessons and experiences feed into any possible future interventions?

For future health and sustainability interventions, the One Health approach has to be enhanced and promoted as a good alternative to obtain integrated and collaborative health solutions. Promoting research strategies where different stakeholders, including academia, play an important role on data generation and its joint analysis, is not only an important tool to improve the understanding of health problems, but constitutes also a good approach to make health problems visible to local people and authorities, which can and must become the responsible for developing and implementing the potential solutions. The One Health evaluation highlighted the importance of learning aspects of such initiatives, not only for individuals and teams, but also for more generic learning and dissemination to decision maker levels in key organisations. This can, however, be a challenge in some politically climates.



5. Results documentation

5.1 Describe (in no more than 10 lines) what difference the intervention has made, for example the most important changes that have occurred as a consequence of the intervention. This text should ideally relate to the synthesis that you drew up in the application, and it will be published on the CISU website's world map used to communicate results.

The NETCAP intervention provided documentation of rodent-borne diseases such as Leptospirosis and Hantavirus in a highly-human-intervened area, the San Buenaventura municipality. By evidencing the circulation of both diseases, regional and national health services put the diseases on their radars for the Northern region of La Paz department. Sharing the obtained data with local health providers and training them on the detection, treatment and control of the disease facilitated the implementation of control measures and made the availability of specific treatments possible for Leptospirosis in the area. Also, based on the NETCAP-DIB health data, local health services incorporated Leptospirosis as part of their differentiation matrix when dealing with undetermined fever cases (before NETCAP-DIB Leptospirosis was not considered at all). Additionally, regional human and animal health services incorporated NETCAP academia partners as key collaborators for some diseases surveillance activities.

5.2 Remember that the report must be supplemented by **images**, **videos**, **documents**, **screen dumps** from social media or other materials produced during the intervention that can be uploaded electronically.

6. Intervention-related information in Denmark

(This is only completed where intervention-related information work in Denmark has been budgeted for)

- 6.1 Briefly describe the primary information activities.
- 6.2 Explain the aims and target group of these information activities.
- 6.3 Assess the extent to which the aims of the information activities have been met.
- 6.4 Remember to supplement the report with visual information products, such as photos and videos (of activities), screen dumps or the like. Such material is used to communicate results through the world map on CISU's website.

7. Follow-up – answer only if relevant

- 7.1 Describe follow-up measures taken in response to good advice suggested by the Assessment Committee in its letter of approval. (*This only applies when such advice was given in the said letter and when no account of this subject has been provided in any previous progress reporting*).
 - If you have chosen not to follow the advice given, the reasons should be stated.
- 7.2 If the application mentioned that the Danish organisation or its partner did not comply with CISU's financial standards at the time of applying, it should be set out which initiatives have been taken to address this. (*This only applies when no account of this subject has been provided in any previous progress reporting*).

8. Additional observations or reflections

Based on this successful pilot project, a larger project application will be submitted to CISU for a larger and longer development intervention to build on and expand the project activities and collaboration network.