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STRENGTHENING ONE HEALTH APPROACHES FOR COUNTRIES IN THE ASIA PACIFIC REGION

August 2020

SDGs:



Countries: Nepal, Papua New Guinea, Sri Lanka and Viet Nam

Project Codes: TCP/RAS/3620

FAO Contribution: USD 490 000

Duration: 1 April 2018 – 31 December 2019

Contact Info: FAO Regional Office for Asia and the Pacific
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Implementing Partners

Nepal: Ministry of Agriculture and Livestock Development (MoALD), Ministry of Health and Population (MoPH) and Ministry of Finance (MoF); *Papua New Guinea*: Ministry of Agriculture and Livestock, Ministry of Health, Ministry of Environment and Ministry of Conservation and Climate Change; *Sri Lanka*: Ministry of Health, Nutrition and Indigenous Medicine.

Beneficiaries

Policy-makers and government staff, private industry, consumer groups and civil society, researchers and universities.

Country Programming Framework (CPF) Outputs

Nepal: CPF 2014-2017: Priority Area 1: Food and nutrition security and safety; Priority Area 2: Institutional and policy support; and Priority Area 3: Natural resource conservation and utilization including adaptation to climate. *Papua New Guinea*: Priority Area 1: Policies and Institutions; and Priority Area 2: Marketing, Agribusiness and Trade. *Sri Lanka*: CPF 2018-2022: Priority Area 1: Food and nutrition security and safety; Priority Area 2: Natural resources, forests and ecosystems including adaptation to climate change.



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BACKGROUND

Recognizing that the Asia and Pacific region was undergoing profound changes as a result of economic growth, urbanization, migration and climate change, and considering the effect of these changes on agricultural and food systems and the environment with consequences for food production, safety and availability in the coming decades, the 33rd Asia and the Pacific Regional Conference, held in 2016, requested a Regional Initiative on One Health. Priority areas developing FAO's earlier work on zoonotic diseases and anti-microbial resistance (AMR) were identified. A Regional Workshop involving 17 countries at which One Health issues in each country were discussed, gaps identified and plans of action proposed was held in Bangkok in October 2017. Following this, three countries - Nepal, Papua New Guinea and Viet Nam - expressed strong interest in taking part in a regional project. Papua New Guinea requested support to raise awareness of food safety and improve biosecurity, including plant health, animal health, hygiene and public health measures. Nepal requested assistance in reducing risks to human and occupational health through sustainable agriculture practices and improved food safety to advance nutrition within food systems, in addition to ongoing work on zoonotic diseases and AMR. Viet Nam requested support to build capacity and update legal frameworks for pesticide use regulations, residue control for trade and safe and sustainable agriculture production. Addressing the use of chemicals for chronic plant health problems and the resulting damage to the ecosystem and improving food safety to advance nutrition within food systems were named as priorities. However, at the time the project was implemented, FAO Viet Nam did not have an FAO Representative in place. Communications between FAO Regional Office for Asia and the Pacific and the Viet Nam country office and the concerned line ministry were considerably delayed. By the time a FAO Representative was appointed, much of the implementation period had elapsed and there was little time available to deliver the originally planned activities. In addition, the Government of Sri Lanka expressed interest that FAO provide technical support to develop a food safety policy and strategic plan for the country. The external review of the food safety system in Sri Lanka, which was conducted by FAO in 2016, identified the non-availability of a food safety policy and strategic framework as one of the key gaps in the country's food safety programme. Therefore, the Government requested that the World Health Organization (WHO) and FAO provide support to strengthen food safety, and collaborate with the Ministry of Health, Nutrition and Indigenous Medicine to develop a food safety policy and strategic plan.

The issues highlighted by each country suffer from a lack of coordinated control as they involve multiple ministries, the private sector and end users such as farmers and consumers. Current solutions, if any, are based on the partial understanding of a sector and not on the broader system in which the problem occurs. The project aimed to work with policy-makers of different sectors, as well as with actors in the food chain and food system, to generate concrete evidence on improved collaboration for solving problems with multiple facets, such as pesticide residues in food, the lack of food safety and hygiene leading to malnutrition and environmental pollution and other risks affecting plant health, animal health and the safety of food produced through these value chains.

IMPACT

The project strengthened the One Health framework in the participating countries. In Nepal, well-formulated food legislation, directives on dairy Good Management Practices (GMP), the experience gained by personnel on Nepal Good Agricultural Practices (GAP) piloting and the direct experience of One Health approaches have been institutionalized and will continue to be implemented. In Sri Lanka, a major food safety project has been operationalized based on the overall food safety policy framework developed under the project. In Papua New Guinea, follow-up actions have already been taken with a project proposal submitted to the Fleming Fund. Spill-over effects were also noted in countries that were not recipients, such as Bangladesh and the Pacific islands, where the expanded One Health approach gained traction. Bangladesh conducted surveys on pesticide residues and heavy metal contamination in fruit and vegetables, as well as in the livestock sector, while the Pacific islands collaborated to adopt the first regional Codex standard on kava as a beverage through the Codex Committee for North America and the South West Pacific.



ACHIEVEMENT OF RESULTS

To a large extent, the project achieved its aims. Although Viet Nam did not participate, Nepal, Papua New Guinea and Sri Lanka all delivered significant results. Inception workshops and national stakeholder workshops were held in all three countries. An analysis of the dairy value chain in Nepal was made and an assessment conducted of the national AMR surveillance system in food and agriculture sectors in Papua New Guinea. One Health platforms were formed in Nepal and Sri Lanka to analyse the policy landscape, and draft food safety policies were formulated; new food safety control rules and a new food safety law were also drafted in Nepal. A food safety policy was developed for Sri Lanka, and an agrochemicals study carried out in Papua New Guinea. In all three countries, capacity was built and awareness raised through training, stakeholder workshops and consultations. Finally, the project produced documents on the consultative process around One Health and technical reports highlighting specific issues in agri-food supply chains, legislation and policies.

IMPLEMENTATION OF WORK PLAN

Difficulties encountered in the recruitment of an international consultant caused delays in the implementation of several activities. All activities were implemented within the planned budget but the delays noted above proved crucial in reducing expenditure and the delivery of activities that would have been backstopped by the international consultant.

The risks envisaged in the Project Document were low or inadequate commitment to inter-sectoral and transdisciplinary collaboration and coordination, limited high-level commitment to integrate One Health and limited initial capacity to work on One Health from local to policy level. These risks were successfully mitigated. No environmental and social risks were caused by the project, which contributed to improving environmental health through the development of One Health frameworks.

FOLLOW-UP FOR GOVERNMENT ATTENTION

In Sri Lanka, efforts should be made to build on the outputs of this project. In Papua New Guinea, a One Health Memorandum of Understanding (MoU) involving all key agencies will provide a strong basis for further action and support should also be given to capacity-building through other projects. In Nepal, the competent authorities should continue to implement the regulations and good practices propagated through this project.

SUSTAINABILITY

1. Capacity development

Modern policies and regulatory frameworks are essential for the institutionalization and sustainability of food control systems and the establishment of mechanisms to combat uncontrolled anti-microbial use (AMU). Multi-sectoral approaches such as One Health need to be embedded in such frameworks and national platforms to ensure that the approach becomes integral to any response to complex issues. The project mainstreamed One Health into evidence-building, policymaking and regulation-setting mechanisms in all three countries. In Papua New Guinea, the ratified One Health MoU empowers the agro-veterinary sector to regulate agrochemicals from import to use and to monitor resistance and residues. In Nepal, the newly drafted Food Safety and Standards Act will coordinate many private and public institutions through various committees, addressing One Health issues in a collaborative way to improve the status of food safety in the country. National food safety policy in Sri Lanka encompasses all individuals and entities involved in the food chain. A project with funding of USD 8 million to strengthen food control in Sri Lanka through support from the European Union (EU) has already been operationalized.

The project created alliances between ministries, the private sector and civil society in all three countries. In Nepal, the Department of Food Technology and Quality Control (DFTQC) and MoALD were the lead government departments and organized training in the One Health approach for teams from crops, fisheries, livestock, food safety, environment and health officers as well as farmers' groups. In Papua New Guinea, the MoU mentioned above demonstrates recognition of the One Health approach and awareness that a complex issue such as AMU must be addressed in partnership. In Sri Lanka, the steering committee consisted of members from all concerned ministries and line agencies carrying out mandated duties in relation to food safety in the country. The formulation of the food policy framework was supported by the Government, the private sector, non-governmental organizations and development partners. All partners have a stake in the newly approved EU-funded food safety project.

2. Gender equality

The project responded to the needs of both men and women. Every effort was made to ensure balanced participation in workshops and meetings. Overall, women's participation was moderate. The project paid particular attention to encouraging the active involvement of women, including farmers, in project implementation.

3. Environmental sustainability

The Food Safety and Standards Act in Nepal established that one member of each committee to be formed had to represent the Department of Environment. The project raised awareness and built capacity of the farmers in GAP. Measures to reduce AMU in Papua New Guinea and improve food control along agri-food chains in Sri Lanka, including reduced food loss and waste, will contribute to environmental sustainability.

4. Human Rights-based Approach (HRBA) – in particular Right to Food and Decent Work

The right to food concept was embedded in project activities, which were aimed at increasing the availability to all citizens of safe and nutritious food. The project contributed to implementing good practices across agri-food chains through GAP and GMP, and advocated to lower AMU. Improving food control by implementing the One Health approach contributes to better marketing opportunities for farmers through linkages with private buyers.

5 Technological sustainability

The project did not specifically introduce new technologies, but emphasized the institutionalization and implementation of safe and good practices. As the One Health approach and food control methods take root, digital and other technologies will be incorporated. The products and services developed are based on internationally accepted norms and standards.

The project developed the technical capacity of government officials at national and sub-national level with regard to good practices, standards and regulatory frameworks. All three countries engaged with multiple stakeholders during workshops, training and brainstorming sessions. Field days and demonstrations were also organized.

In Sri Lanka, stakeholders have demonstrated the ability to raise resources to build on the outputs of this project with technical assistance from FAO and the United Nations Industrial Development Organization (UNIDO). In Papua New Guinea, the One Health MoU provides a strong basis for further action and FAO will continue to support capacity building through other projects. In Nepal, competent authorities continue to implement the regulations and good practices propagated through the project.

6. Economic sustainability

One Health and food safety are top developmental priorities in all project countries and the respective lead ministry in each country has allocated resources accordingly.

The products and services developed by the project are affordable to beneficiaries. The project focused on an enabling environment and mechanisms to foster the adoption of good practices and multi-sectoral co-operation to solve problems with multiple perspectives through stakeholder consultations, the formation of institutional platforms and the development of technical packages that can be easily implemented by beneficiaries.



DOCUMENTS AND OUTREACH PRODUCTS

- ❑ Back-to-office report of Lead Technical Officer (LTO) backstopping mission to Nepal, 21-26 June 2018.
- ❑ Report on workshop for review and update of Food Safety and Standards Act (draft), 8-9 October 2018. G. Dawadi.
- ❑ Report on stakeholders' consultation workshop on Draft Food Safety and Standards Act, 19 December 2018. G. Dawadi.
- ❑ Food Safety and Standards Act (draft). 2018.
- ❑ Directives on milk and milk product safety and quality (dairy GMP directives). 2018.
- ❑ Report on awareness programme on good manufacturing practice (dairy), 13 December 2018. G. Dawadi.
- ❑ Food Safety and Standards Regulation (draft). 2019.
- ❑ Report on assessment of risk and hazards in dairy value chain. 2019. Alok Shrestha.
- ❑ Back-to-office report of LTO's backstopping mission to Nepal, 24-28 March 2019.
- ❑ Report on farmers' orientation training on the application of Nepal GAP in vegetable production, 11-12 February 2019. G. Dawadi.
- ❑ Report on development of curriculum for the training on One Health to the technical team (agriculture, livestock, fishery, food safety, environment and health officers), 16-17 May 2019. Keshav Premy.
- ❑ Report on support for the development of documents and other critical prerequisites at farm level for GAP certification of vegetable production. 2019. Quality and Environmental Management Service.
- ❑ Report on audit of GAP piloted farms prior to certification, 1-3 September 2019. G. Dawadi.
- ❑ Report on orientation training-workshop for the extension of Nepal GAP in vegetable and fruit production, 1-2 October 2019. G. Dawadi.
- ❑ Report on high-level meeting for orientation and interaction on Nepal GAP, 25 October 2019. G. Dawadi.
- ❑ Report on orientation workshop on GAP (organized for agriculture officers from the provinces), 20-22 December 2019. G.C. Arun.
- ❑ A situation analysis of the usage of agrochemicals, the implications on food safety and related One Health approaches in Papua New Guinea. January 2020. Nime Kapo.
- ❑ End of assignment report, 30 January 2020. G. Dawadi.
- ❑ National Food Safety Policy Framework for Sri Lanka. January 2020.
- ❑ GAP check lists 01 to 05 (in Nepali) to be filled and maintained in the farm.
- ❑ GAP complaints and appeal format (in Nepali).
- ❑ GAP confidential agreements (in Nepali).
- ❑ GAP farm document (in Nepali).
- ❑ GAP procedure for complaint handling (in Nepali).
- ❑ Materials for the observance of the first World Food Safety Day 2019 in Sri Lanka (in English and Sinhala).

ACHIEVEMENT OF RESULTS - LOGICAL FRAMEWORK

Expected Impact	Strengthened One Health framework in selected countries with supporting policies in place, approach institutionalized, capacity developed and lessons shared		
Outcome	Evidence of the use of interdisciplinary approaches to solve complex problems and positively influence plant, human, animal and environmental health in selected agricultural and food systems in the Asia-Pacific		
	Indicator	Functional One Health platforms established to address complex multi-faceted issues along the food chain based on evidence	
	Baseline	Three countries with One Health platform around zoonotic diseases	
	End Target	Three countries with broader One Health strategy and platform in place along with Standard Operating Procedures for problem identification, characterization, mitigation and response	
	Comments and follow-up action to be taken	The following studies were conducted: analysis of the dairy value chain in Nepal and an assessment of the national antimicrobial resistance surveillance system in food and agriculture sectors in Papua New Guinea. One Health platforms were formed in Nepal and Sri Lanka to analyse the policy landscape and draft food safety policies formulated. New food safety control rules were drafted in Nepal.	
Output 1	Evidence generated through case studies of One Health approaches at country level		
	Indicators	Target	Achieved
Baseline	Inception workshop and baseline study conducted	Four	Partially
Comments	Inception workshops in three countries were conducted. The regional workshop was not conducted because of time constraints. Viet Nam did not implement the project.		
Activity 1.1	Organize country-level stakeholder consultation workshop to identifying potential solutions and collaborations needed at different levels, and prepare an action plan		
	Achieved	Yes	
	Comments	National stakeholder workshops were conducted in Nepal, Papua New Guinea and Sri Lanka. The issues to be taken up under the One Health framework were shortlisted as food safety in Nepal and Sri Lanka, and AMU/AMR in Papua New Guinea.	
Activity 1.2	Perform situation assessment on risks and challenges for One Health priority area in each country; identification of relevant stakeholders; compilation of relevant information on priority area reflecting different experiences of range of stakeholders (from local to central level)		
	Achieved	Yes	
	Comments	The major gap to be addressed in food control was the lack of an overarching policy framework in Sri Lanka. The development of a policy and action plan that could propose measures across the food chain to improve food safety was pursued through stakeholder discussions and desk reviews. In Papua New Guinea, the project conducted a situation analysis focused on the use of agrochemicals including pesticides, veterinary drugs and fertilizers in primary production areas of livestock, aquaculture, apiculture, animal feeds and horticulture, where they could become chemical contaminants of the food chain. In Nepal, support to the modernization of the legal framework for food safety (the updated food safety law) and the wider adoption of GAP were recognized as the key priority areas through country assessment reports.	
Activity 1.3	Prepare country specific case studies: One Health approach to food safety through policy and legislation in Nepal; Risks and their management in wet markets and food chains in Papua New Guinea; and Strengthening regulatory frameworks for pesticide use through an evidence-based approach in Viet Nam		
	Achieved	Partially	
	Comments	The Food Safety and Standards Act in Nepal was technically supported by FAO. Case studies on the state of food safety practices in the crop and dairy value chain were prepared. The formulation of new regulations based on hazards and risks identified was supported. In Papua New Guinea, case studies were conducted among livestock and crop farmers as well as feed manufacturers and agricultural suppliers. In Sri Lanka, past studies by FAO, WHO, UNIDO and others were collated to develop the evidence package for the formulation of the food safety policy and plan of action.	
Activity 1.4	Organize regional workshop with stakeholders from different sectors involved in One Health from Nepal, Papua New Guinea, Viet Nam and selected countries in the Asia Pacific		
	Achieved	No	
	Comments	The workshop was not organized as a result of time constraints, caused by the operational difficulties specified below.	

Output 2	Strategy translated into practice to address new thematic areas based on evidence and projected impact		
	Indicators	Target	Achieved
	Report on the assessment of current risk and hazards in dairy chain (Nepal). Final Draft of Food Safety and Standards Act and its regulations (Nepal). Food safety policy framework for Sri Lanka. A situation analysis of the usage of agrochemicals, the implications on food safety, and related One Health approaches in Papua New Guinea.	Defined	Yes
Baseline	Older food regulatory frameworks were in place or there was little multi-sectoral activity		
Comments	The project supported DFTQC, the food safety enforcement authority for Nepal, to upgrade its regulatory framework. The dairy chain was selected as a strong case for an assessment of hazards and risks. The situation analysis of the use of agrochemicals in Papua New Guinea was conducted by multiple organizations. The food safety policy framework in Sri Lanka was formulated under the leadership of MoH and with the involvement of FAO and sister agencies.		
Activity 2.1	Share information on One Health activities: evidence and case studies developed during project and from other relevant information sources (country and regional level)		
	Achieved	Yes	
	Comments	The assessment of current risk and hazards in the dairy chain in Nepal was performed by an expert. The new draft food safety law was examined by FAO. The food safety policy in Sri Lanka was drafted and the agrochemicals study in Papua New Guinea was performed through case analyses in the crops, fisheries and livestock sectors.	
Activity 2.2	Raise awareness and obtain feedback as input to fine-tune One Health strategies during country-level stakeholder meetings to present case studies, lessons learned		
	Achieved	Yes	
	Comments	A task force was set up in Nepal to co-ordinate activities around updating the draft law and collecting information from the dairy value chain, with the guidance of international experts and the LTO. Three stakeholder workshops were held. In Papua New Guinea, one national and two sub-national workshops and multiple consultations with agencies were held. In Sri Lanka, a number of stakeholder meetings backstopped by consultants from FAO and WHO were held to develop the food safety policy framework.	
Activity 2.3	Implement mitigating strategies in the cases identified through co-operation across agencies, private sector and civil society. Update policies and regulations in Nepal. Provision of training and capacity-building. Strengthen risk management including training and dissemination in good practices in Papua New Guinea based on hazards and risks identified in the food chain.		
	Achieved	Yes	
	Comments	<p>The following were developed:</p> <ul style="list-style-type: none"> • Report on the assessment of current risk and hazards in dairy chain (Nepal) • Final Draft of Food Safety and Standards Act and its regulations (Nepal) • Formats, checklists and training notes based on Nepal GAP (developed through an earlier project) • Food safety policy framework for Sri Lanka • A situation analysis of the usage of agrochemicals, the implications on food safety, and related One Health approaches in Papua New Guinea 	

Output 3	Results and lessons learned communicated and guidance on One Health collaboration developed		
	Indicators	Target	Achieved
	Technical reports and documents listed in next session	Defined	Yes
Baseline	0		
Comments	Documents on the consultative process around One Health and technical reports highlighting specific issues in agri-food supply chains, legislation and policies were produced.		
Activity 3.1	Document and disseminate evidence and process around addressing problems and highlighting advantages and challenges using One Health approach at different levels		
	Achieved	Yes	
	Comments	A number of documents on the consultative process around One Health and technical reports highlighting specific issues in agri-food supply chains, legislation and policies were produced.	
Activity 3.2	Develop guidance on using a broad-based methodology that also leads to sector-specific solutions		
	Achieved	Yes	
	Comments	A number of documents cover sector specific solutions such as GAP and GAP standards for crops, hazards and mitigating measures in the dairy chain, and the use of anti-microbials in crop, fisheries and livestock sectors.	
Activity 3.3	Develop concept notes for projects and approach donors and international financing institutions		
	Achieved	Yes	
	Comments	Concept notes on GAP were developed for Nepal and are being submitted to Standards and Trade Development Facility. A submission to the EU in Sri Lanka was successful and a USD 8 million project has been operationalized in partnership with UNIDO. Concept notes from Papua New Guinea were submitted to Fleming Fund and to other donors.	

Partnerships and Outreach

For more information, please contact: Reporting@fao.org

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