CALIDENA Workshop Nepal – Medicinal and Aromatic Plants (MAPs) and Essential Oils Value Chain

CALIDENA Follow-up Workshop

August 26, 2014, Kathmandu



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Objectives and overview I.

The overall objectives were to do follow-up for the action plans drawn up at the CALIDENA workshop and discussion on the progress in implementing the agreed actions, actions still outstanding and the identification of new actions. The following outputs were envisioned for this follow-up CALIDENA workshop.

- a. Assessment and revision of the progress of action
- b. Opportunity to broaden and deepen the diagnostic
- c. Carry out new joint activities
- d. Review key issues in-depth on a more specific and detailed level

37 members from various MAPs stakeholders (DPR/NPRL, NBSM, DOF, PTB, NEHHPA, DFTQC, Traders, media, etc.) participated (see participants list in the annex). Mr. Yam Bahadur, Thapa, DG, DPR briefed on the workshop objectives, and overview of past CALIDENA workshop with major highlights. Mr. Sichan Shrestha and Mr. Pramesh Lakhe, CALIDENA Facilitators described the overview of the CALIDENA follow-up workshop and agenda in details.

II. **Learning experiences**

All participants expressed their personal experiences with the CALIDENA approach with the help of cards on three aspects: implementation, insights and difficulties faced, which are highlighted below.

Implementation:

- a. Technical sub-committee formed for preparing GACP, GCP, and product quality standards.
- b. Budget constraints for implementation of activities for government. It must be within the budget and approved programme.
- c. Motivation level of participants is
- d. Prepared MSDS of 10 essential oils
- e. Calibration of new and existing balance

Insights:

- a. Calidena process is effective and long process but sustainable.
- b. Comprehensive package for overall development of MAPs

My personal experience with CALIDENA EFFORT Difficultie Figure 1: Notes of "personal experience with CALIDENA'

from the participants

Difficulties:

- a. Roles and communication channel of all stakeholders should be clearly defined
- b. Coordination is lacking

- c. Seeking joint efforts
- d. Budget constraints
- e. Faced difficulties in finalizing SOPs

III. Presentation

As per the standard power point template with four major questions: a. what was agreed in the action plan? b. What have we achieved so far? c. What difficulties we have faced? d. The way forward, NPRL and NBSM presented progress of action plans on four QI categories. Ms. Rose Shrestha, NPRL presented on good practices, Mr. Indu B. Joshi, NBSM presented on Standards, and Metrology &

Calibration, and Ms. Jyoti Joshi, NPRL presented on laboratories. The four presentations are attached separately to the report.

After each presentation, key discussion points were noted in the panel (refer to Figure 2) which are summarized below.

Good Practices:

- a. GACP on four herbs have been developed so far, but do not comply with the WHO standards.
- b. Generic common guidelines should be developed.
- c. Data has been collected from Ilam, Salyan and Godarvari for practices.
- d. Sharing was focus on what DPR has been doing rather than what initiatives have been done as per the action plan.
- e. Two rounds of discussions were held, one at DPR and another at NBSM.
 Technical committee has been formed.
 Work division was done.
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- f. Previous meetings concluded to prepare GACP generic guidelines and quality standards on four herbs as per the WHO standards. Later on, GACP guideline for Chiraito and quality standards for Timur will be prepared.
- g. Quality standards of Timur was discussed where Mr. Puspa Raj Shrestha will provide technical inputs and Ms. Jyoti Joshi Bhatta, NPRL will provide coordination support.
- h. Coordination among the stakeholders was lacking.
- i. Pesticides residue risk analysis should be included in the standards. DFTQC is involved in the residue analysis.

Standards and Metrology & Calibration:

- a. Formal letter from industries should be registered at the NBSM office available for conducting awareness raising
- b. Mass media shall be used for sensitization which is effective
- c. Regular calibration services provided by NBSM as per the norms
- d. Technical sub-committee formed.
- e. Awareness raising activities on MAPs do not fall under regular services from NBSM thus for specific activities additional resources is needed. For regular awareness activities there is a budget allocated.
- f. Legal metrology services should be provided by NBSM.

Laboratories:

- a. Inter laboratory comparison (ILC) testing
- b. Homogeneity test for this ILC for lemon grass oil was not considered that important
- c. Accreditation of NPRL laboratory

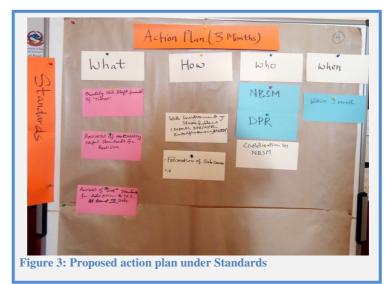
IV. Plenary Presentation of Revised Action Plan

After the group work session, all participants provided inputs in the four action plans. Each leader of the group summarized the dialogues of actions to the other three groups in a rotation basis. The final outputs of the action plans were consequently presented in the plenary as input to the action plans. While developing action plan three criteria (doable within existing resources, accomplished within

time frame, and immediate results) were taken into consideration. Summary of the discussion under four categories is provided below where as detail action plan is provided in the annex.

Good practices:

a. The major two activities
 proposed were preparation
 of generic guidelines;
 GACP for cultivated
 plants and GCP for wild
 collection plants by
 following WHO framework.



- b. Technical committee formed for preparation of guidelines.
- c. Guideline prepare for four species were submitted to NBSM. NBSM has formed a technical committee to endorse it for further development of national standards. Technical committee has reviewed the documents and proposed to separate good practices guidelines and standards. Sub-committee has been formed for further revision.

Standards:

a. Sub-committees are necessary for speeding up the process to prepare national standards.

Metrology and Calibration:

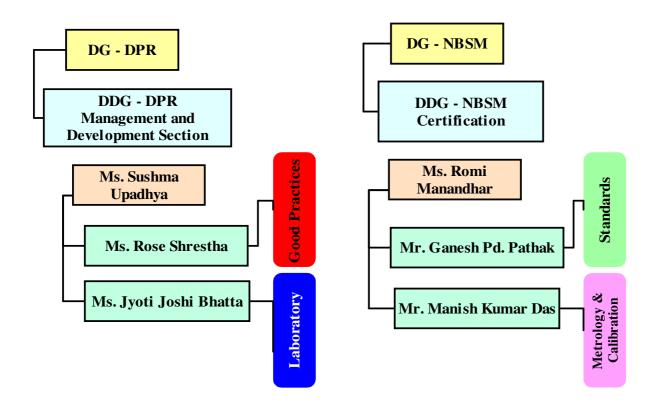
- a. Two activities proposed were regular calibration services and awareness program.
- b. For specific program on awareness program, NBSM does not have a separate budget allocated.
- c. Need assessment form should be filled out to understand gaps from the industries.
- d. Legal metrology services provided by NBSM

Laboratory:

- a. Continue previous remaining process for ILC test.
- b. For data analysis training shall be conducted in support by PTB.
- c. Ulrike will support in sending sample to Primavera for testing.

V. Responsibility matrix

Action Plan Implementation Task Force



I. Conclusion remarks

Mr. Julia, PTB expressed satisfaction with the progress and commitments on MAPs quality infrastructure by all stakeholders in spite of various issues. Regarding funding and resources, she has made it clear that PTB will support in some activities specially providing experts, training and capacity building, and others include awareness events, preparing guidelines, etc. She has proposed to have another follow-up workshop in Jan/Feb 2015.

Mr. Yam Bahadur Thapa, DG, DPR in his concluding remarks said that CALIDENA process has helped in better coordination between all stakeholders of MAPs sector and should continue to get the long-term goal. He thanked PTB for showing interest in providing technical support. He is optimistic to show results of the action plan within three months. He requested private entrepreneurs to participate and collaborate with the government bodies to enhance quality of products and earn more dollars and the trade.

II. Annexes

1. Agenda for Short training for CALIDENA Facilitators

CALIDENA Workshop Nepal – Medicinal and Aromatic Plants (MAPs) and Essential Oils Value Chain

Follow-up workshop

August 26, 2014, Kathmandu

Objective: To do follow-up for the action plans drawn up at the CALIDENA workshop and discussion on the progress in implementing the agreed actions, actions still outstanding and identification of new actions.

- a. Assessment and revision of the progress of action
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Program sequence

Time	Activity	Responsible	Methodology/ Materials
10:00 - 10:30	Welcome and Introduction of the participants	Facilitators*	Briefing notes
10:30 - 11:00	Presentation of the program and objectives	Mr. Y. B Thapa, DPR, Program Host	PowerPoint slides
11.00 – 11.30	Sharing of the general learning experience	All participants	What was my personal experience with the CALIDENA implementation process in the past months? What new insights did I get about quality services of the MAPs/Essential Oils VC?
11:30 – 1:00	Review of the progress in implementing agreed actions	DPR, NBSM and Associations	Presentation of progress shared by concerned organizations on four topics: a. Good Practices, b. Metrology and Calibration, c. Standards, d. Laboratory (20 min. per topic incl. discussion) What was agreed in the action plans? What have we achieved so far? Where did we face difficulties?

			What do we need to overcome these difficulties? How will we move forward?
			Reflection of the presentation by discussion
1:00 - 2:00	Lunch Break		
2:00 – 3:00		Facilitators*	Incorporate all details in the action plan format
			What could not happen as per the action plan and why?
3:00 – 3:30	Identification of new necessary actions discovered in the	Facilitators*	Incorporate all details in the action plan format
	course of the process		What should be done to make it happen?
			Key message: "continuous improvement follows a new circle of learning"
3:30 – 4:00	Definition of precise dates and persons in charge	Facilitators*	Incorporate all details in the action plan format
4:00 – 4:30	Planning of the follow-up committee's work	Facilitators*	
4:30 – 5:00	End of the day	Mr. Y. B Thapa, DPR, Program Host, Dr. Julia Micklinghoff, PTB Secretary, Ministry of Forests and Soil Conservation	Closing remarks

^{*}Facilitators: Pushpa Raj Shrestha, Jyoti Joshi Bhatta, Sichan Shrestha, Pramesh Bahadur Lakhey

2. List of participants

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3. Revised Action Plan

Proposed Action Plan by four groups during the Follow-up CALIDENA workshop (August 26, 2014)

Good Practices

What	How	Who	When
What I. Preparation of GACP generic guidelines Preparation of GCP generic guidelines	Follow WHO GACP for cultivated & GCP guidelines for wild collection 1. Meeting of Technical Subcommittee to prepare the methods for development of GACP generic guidelines (August 31, 2014) 2. Drafting of Generic guidelines using the developed methods (first draft) (7 days) 3. Circulation first draft generic guideline to technical subcommittee members for feedback 4. obtain feedback from the subcommittee members (7 days) 5. Revised draft preparation on the basis of the feedback (second draft) (7 days) 6. Send to stakeholders for feed back i. Upload draft guideline in DPR website (www.dpr.gov.np) ii. Also by email (till September 24, 2014) 7. Obtain feedback from the stakeholders (two weeks) 8. Integrate the feed back into final draft (third draft) (end of	Who DPR/NBSM/ Technical Sub - committee	by November 2014
	September, 2014) 9. Prepare for consultation workshop		

	Consultation workshop for draft	DPR	December
	<u>verification</u>		2014
		Support for	
		consultation	
		workshop - PTB	
Sensitization	Awareness workshop for the	DPR	by January
of the MAPs	producers and collectors regarding		2015
producers and	GACP and GCP.	Support for	
Collectors	Two workshops:	awareness	
	Central level at Kathmandu	workshop - PTB	
	Regional level at Nepalgunj		

Metrology and Calibration

What	How	Who	When
Sensitization of	Awareness on calibration services	NBSM	Awareness
calibration and	(General and specific on MAPs)	DVD	for Specific
metrology services	Information madrage	PIB – support	- by
services	Information package	awareness workshop for	September 2 nd week
	Web site	specific services	2 WCCK
	Metrology	Stakeholders	Within 3 months
	e-journal	Coordination with	
		DPR for inclusion	
		of MAPs	
D '1'	Nr. 1 1 1	stakeholders	X7 1
Providing calibration	Metrological assessment survey –	NBSM	Yearly
services	Application form will be available in the website		
(Regular	in the website		
NBSM	Provide Mass, Temperature,		
services)	pressure, and volume services		
,	through 8 regional office of NBSM		
	Legal metrology services -		
	commercial equipments such as		
	balance, weight, etc., use for sales		
	Lab metrology		

Standards

What	How	Who	When
Quality	Review of existing Nepal standards	NBSM	Within 3
standards	for revision		months
formulation		DPR	(November,
for Timur	Involvement of stakeholders		2014)
(Zanthoxylem	(Experts, DPR/NPRL,	Coordination by	
armatum)	Entrepreneurs, NBSM,	NBSM	
	Academician)		
	Review of International standards		
	for adoption to NS (at least 2		
	standards)		
	i. Use of standard format (quality		
	standard of Indian medicinal		
	plants)		
	ii. NPRL and Puspa Raj Shrestha		
	drafting of Timur standards		
	iii. Sample verification (2 samples		
	by NPRL Methods (1 month)		
	iv. Submission to the technical		
	committee (7 days)		
	v. Sharing workshop		
	vi. Book Publication		
	The standards contain:		
	1. Plant Description		
	2. Physical and chemical		
	parameters		
	3. Identification methods		
	4. GC Report		
	5. Coordination/Reference		

Laboratory

What	How	Who	When
Collaborative test	•	DPR/NPRL	Within 2
(ILC)	rotation, specific gravity	SHAMBALA	months
	Confirm with buyers	Herbal	
	Provide samples	Training on Data Analysis -	
	Distribute standards methods	PTB	
	Result collection		
	Collect data from three laboratories		
	Statistical technique		
	Training on data analysis/evaluation of ILC result		
	Analysis of ILC results (Z-Score)		
	Meeting to discuss results		
Confirm Standards	Request to PTB to deliver		
	samples for ILC to Primavera		
	Life GmbH, Germany		