

UNITED NATIONS DEVELOPMENT PROGRAMME			MISSION REPORT SUMMARY
Name: Tashi Dorji	Group/Unit:	UNDP/E2I	Date: 6 June 2015
Approved Mission Itinerary: Thimphu – Kuala Lumpur – Sarawak – Singapore – Bangkok - Thimphu			Telephone Number: +975 2 322424 ext. 125
Inclusive Travel Dates: From 16-29 May 2015			Key counterpart(s): <ol style="list-style-type: none"> 1. Forest Research Institute of Malaysia (FRIM); 2. Center of Excellence for Biodiversity Law (CEBLAW) 3. Sarawak Biodiversity Center (SBC) 4. Nanyang Polytechnic 5. Biodiversity-based Economy Development Office (BEDO) 6. Thai-China Flavours and Fragrances Industry Co., Ltd. 7. Mae Fah Luang University (MFLU)
Purpose/Objective of Mission: <ol style="list-style-type: none"> 1. Institutional visit to Southeast Asian countries to learn about bio-prospecting, ABS and natural product development. 2. Establish institutional linkage with FRIM, SBC, CEBLAW, NYP, BEDO, TFCC and MFLU in ABS and bio-prospecting. 			
Brief Summary of Mission Findings: <ol style="list-style-type: none"> 1. Meeting with officials and researchers at FRIM: FRIM gave a presentation on the documentation of medicinal and aromatic plants used by indigenous communities (<i>Orang Asli</i>) in Peninsular Malaysia. The presentation covered topics on Socio-economics survey; Training and capacity building; and Laboratory analysis and prototype product development. Visited FRIM's Laboratory in Natural Products Division wherein the participants were demonstrated how active ingredients from plants based on traditional knowledge were extracted and developed into products. 2. FRIM presents a good opportunity for Bhutan to collaborate in bio-prospecting especially in training young researchers in research and product development given their technical expertise and the level of sophistication in laboratory equipment. 3. Meeting with Center of Excellence for Biodiversity Law (CEBLAW): CEBLAW is a National Center for Biodiversity Law established by the University of Malaya and the Government of Malaysia. Prof. Gurdial Singh Nijar presented on Malaysia's ABS law and gave an overview of the ABS processes covering national ABS processes, scope, access, benefit sharing, PIC for biological resources and TK, compliance, check points. 4. CEBLAW has championed in ABS law and the ABS processes which is compliant with Nagoya Protocol. NBC should explore opportunities to link up with CEBLAW for technical support while reviewing the Biodiversity Act 2003 and formulating the Biodiversity Rules and Regulations to align with ABS processes. 5. Discussion with Sarawak Biodiversity Center (SBC): met with the CEO and researchers at SBC. Presented on the work of SBC in TK documentation, ABS and Bio-prospecting. Participants were shown on how SBC has undertaken product development of a plant species called <i>Litsea cubeba</i> based on the traditional knowledge of an indigenous community called Bidayuh. SBC has ventured into developing several types of personal care products under the brand name LitSara®. 6. Field visit to Kiding village: Participants were taken on a field visit to Kiding village which is one of the indigenous communities where SBC is involved in TK documentation and bio-prospecting based on ABS processes following PIC in the use of their TK. The indigenous community of Kiding are engaged in distillation of essential oils from <i>Litsea</i> plant and SBC buys oil for further product development. The communities are trained on sustainable harvesting, propagation of the plant and collection of herbarium specimen. 7. Bio-prospecting based on traditional knowledge has proven huge potential for biodiversity rich countries. This has been clearly demonstrated from our visit to FRIM and SBC. Both the institutes have advanced in community engagement following ABS processes. Through the NPIF project, Bhutan should also make every effort to document TK in all the dzongkhags and then work towards bio-prospecting through research and development. 8. Meeting with Nanyang Polytechnic (NYP): Met with the Director and faculty of school of Chemical and Life Sciences. The participants were introduced to the research and development undertaken by the different disciplines under the school such as Biotechnology Applied Research Group, Medicinal Chemistry Group, Chemical & Green Technology, Food Sciences and Nutrition. The Director of the School expressed keen interest in collaborating with Bhutan in the areas of R & D in bio-prospecting and product development related to natural resources. 9. Meeting with Biodiversity-based Economy Development Office (BEDO): Is a public organization in Thailand established under the Royal Decree in 2007 to promote biodiversity resources utilization for economic purposes and encourage sustainable conservation of 			

biodiversity and local wisdom at community to national level. Some of the projects initiated by BEDO are: Fasai gallery established within the complex to increase sales/distribution channel for biodiversity-based products; BioEconomy Promotion Mark – has been developed to endorse products by biodiversity-based community enterprises or business operators so that products are standards assured and well recognized by consumers and markets. 10 products have received BioEconomy Promotion Mark since its introduction in 2013.

10. **Field visit and meeting with Thai China Flavors and Fragrances Industry Co. Ltd (TCFF):** TCFF was established in 1988 as a joint venture between two international corporations. The company deals in research and extract of valuable products from her sources for use in consumer products. TCFF focuses on research and technological innovation in: flavors, fragrances, essential oils, aromatherapy blends, and natural extracts. The Company currently works with around 400 families who are engaged in growing aromatic plants and supplies raw materials to the company.
11. **Meeting with faculties and partners of Mae Fah Luang University (MFLU):** The University established the Bangkok Campus as the School of Anti-Aging and Regenerative Medicine in 2008. It offers study program at the M.Sc. and Ph.D. level in Dermatology, Anti-Aging and Regenerative Medicine. MFLU partners with Menjong Sorig Pharmaceuticals and will provide technical support in the development of cosmetic and wellness products.

Recommendations/Actions to be Taken:

1. Documentation of traditional knowledge is critical for research and product development from biological resources. TK documentation of biological resources in all the 20 dzongkhags will have to be given priority through the NPIF project [NBC & UNDP CO].
2. During the visit, project partners have interacted with government institutes and private companies, where they have expressed interest to collaborate in research and development, ABS mechanism and capacity building. Project partners should therefore, pursue establishing formal partnership with selected institutes (specifically with SBC, MFU, FRIM, and CEBLAW) within 2015 & 2016 [NBC, MSP & UNDP CO].
3. We recognize the importance of putting in place a strong regulatory and institutional framework for ABS to safeguard our biological and genetic resources from exploitation. There are best practices on ABS regulatory framework and ABS processes from Malaysia. Through the project, we should focus on reviewing our existing legal framework such as the Biodiversity Act of 2003 and incorporate key elements of ABS and come up with new regulations on ABS [NBC & UNDP CO].

Distribution:

Dy. Resident Representative, UNDP
Mr. Jigme Dorji, Portfolio Manager, E2I Portfolio