May 2006 Number 27

Washington-area professionals gathered on May 18th for the twenty-seventh IRG Discussion Forum, “Natural Products and Rural Enterprises: Linking Economic Growth, Environmental Conservation and Rural Empowerment.”

Natural products, defined as non-timber forest products (NTFPs) and non-traditional cultivated crops, represent an important source of income and subsistence for poor, rural households in developing nations. Additionally, natural products-based enterprises provide opportunities to promote sound environmental management practices, rural empowerment and good governance. However, efforts to leverage the full potential of the natural products sector face a variety of challenges, including improving community access to productive forests; sustainable management of the resource base; increasing production of wild-harvested products, ensuring consistent quality control; addressing market volatility; and assisting poor, isolated communities to meet strict global production standards.

Strengthening natural products enterprises to enable them to meet these challenges will require: decentralized, community-based resource management; local-level value-addition; access to microfinance; strong market information systems; trusted certification programs; and community-based rural enterprise development programs.

Natural Products – An Overview

International Resources Group (IRG) is an international professional services firm that helps governments, the private sector, communities, and households manage critical resources to build a better tomorrow. IRG has headquarters in Washington, DC, headquarters, corporate offices in India and the Philippines, and project-dedicated offices around the world. IRG is ISO 14001 Certified.

About the IRG Discussion Forum

The IRG Discussion Forum is an event that addresses issues affecting international development. Each session is informal, with guest speakers and attendees participating in a personal capacity. For comments, questions, or information on the Discussion Forum, contact discussionforum@irgltd.com or call IRG at 202-289-0100.

From Left to Right: Mike McGahuey, Senior NRM Advisor to USAID’s Economic Growth, Agriculture and Trade Bureau; Ann Koontz, Senior Program Advisor for EnterpriseWorks/VITA; Mike McGahuey, Senior Natural Resources Management Advisor in USAID’s Economic Growth, Agriculture and Trade Bureau; Dr. Peter Wilshusen, co-director of the Bucknell University Environmental Center; and Dr. Pradeep Tharakan, IRG’s technical lead for USAID/DARMAE natural products assessments.
In 2005, USAID/FRAME sponsored assessments of the current state of specific natural product value chains in Senegal, Guatemala and Nepal, using a comprehensive nature-wealth-power framework, to raise awareness about NTFPs and identify better ways to intervene along these value chains.

Nepal's Essential Oils
Nepal's national products sector generated almost US$55 million in trade in 2004. Almost 40,000 Nepalis derive economic benefits from the harvest, trade and processing of essential oils, a subset of the NTFP sector. Ms. Koontz summarized the findings of a survey of two essential oil, Jatamansi and Wintergreen, in representative production, trade and processing areas of Nepal.

“Over the last decade, Nepal’s national products sector has increased both community forest user rights and local processing levels,” Ms. Koontz said. “While previously over 90% of Jatamansi was traded illegally in raw form to India, now 75% is processed into essential oil in Nepal. Wintergreen is 100% processed in Nepal, with 90% of the oil sold on the domestic market.”

Ms. Koontz identified a number of strategies to further strengthen the value chain. These include expanding sustainable harvesting practices, promoting biodiversity conservation and assisting Community Forest User Groups to develop effective operations plans. Recommended economic strategies include providing more financing for investments, promoting the domestic use of essential oils and reducing transaction costs. In addition to these value chain strategies, Nepal should also continue to diversify away from Indian raw material markets and expand market information systems, she suggested.

Senegal’s Gum Karaya
Senegal is the world’s second largest exporter of Gum Karaya (GK), sap from a native tree used in pharmaceuticals and cosmetics. According to Mr. Mike McGahuey, “The potential national production of GK is estimated at more than 50,000 tons, but the current level of exploitation is only about 2 to 3 percent of that.” An assessment done in 2003 identified challenges facing Senegal’s GK industry, including poor organization and poor communication along the value chain, destructive harvesting techniques, uneven quality control and poor storage facilities, high transaction costs, and lack of access to liquid assets.

A variety of interventions have taken place since then, including training in: harvesting and silviculture techniques; forest code; decentralization laws; and improved communication among all players in the value chain and have instituted improved processing and storage techniques and better quality control. As a result, personal incomes in the region where GK is collected, which is one of the poorest areas of the country, rose from US$200 in 1996 to US$500 in 2004, and annual revenues for targeted producer enterprises rose from under US$35,000 to over US$50,000. To protect their assets and ensure continued revenues, rural communities are also being encouraged to exercise their right to manage local resources responsibly.

Guatemala’s Xate Palm
Xate palm leaves, a commonly used fiber in floral arrangements, are an important source of reserve income for many Guatemalan households, stated Dr. Peter Wilshusen. Guatemalan government statistics indicate that xate palm harvesting and processing is a source of livelihoods for over 2 percent of the economically active population in the District of Peten. At the national level, 2005 data suggests total income from the export of xate palm to be approximately US$6.2 million.

“A recent study of the xate palm industry in Guatemala reveals that the distribution of total profits from xate harvesting diverges significantly,” Dr. Wilshusen said, with harvesters receiving about 18 percent, contractors and transporters about 10 percent and wholesalers approximately 24 percent. Over 23 percent of the total product value is lost during processing. The study further suggests that wild populations of the two most commercially valuable species of the plant are declining.

Although Guatemala has a strong institutional foundation for the protection and management of natural resources,” Dr. Wilshusen said, “stronger integration, implementation, enforcement, monitoring and evaluation of the xate palm populations is needed.” He also suggested that there is a need for more information sharing and coordination along the commodity chain. At present, none of Guatemala’s xate palm harvesters belong to a local association.

Next Steps
According to Mr. McGahuey, the information garnered from these and other FRAME assessments “has helped to inform decision makers of opportunities to decrease rural poverty by investing in improved institutions, training and legal frameworks that make producers more active and effective in natural product value chains.” As a result, value chain actors are devising innovative solutions to the challenges they face. Dr. Tharakan noted these include decentralized resource management, participatory ecological monitoring, certification programs, market information systems, access to microfinance and community-based enterprise development. Another important step, he suggested, will be the development of a comprehensive, flexible framework such as the one used to conduct the USAID/FRAME projects.

“FRAME assessments inform decision makers of opportunities to decrease rural poverty by investing in improved institutions, training and legal frameworks that make producers more active and effective in natural product value chains,” assessments to develop case-specific solutions. In 2006, USAID/FRAME will undertake similar assessments in Ecuador and Madagascar in collaboration with USAID’s Microenterprise Development office. These assessments will go beyond “stock taking” to develop action plans and intervention strategies through participatory dialogue. Value chain actors can then implement these recommendations to enhance their competitiveness.
promoting biodiversity conservation and assisting Community Forest User Groups to develop effective operations plans.\footnote{In 2005, USAID/FRAME sponsored assessments of the current state of specific natural product value chains in Senegal, Guatemala and Nepal, using a comprehensive nature-wealth-governance framework, to raise awareness about NTFPs and identify better ways to intervene along these value chains.}

**Recommended economic strategies**

- Providing more financing for investments, promoting the domestic use of essential oils and reducing transaction costs. In addition to these value chain strategies, Nepal should also continue to diversify away from Indian raw materials and expand market information systems, she suggested.

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**FRAME Natural Product Studies:**

- [http://www.frameweb.org/naturalproducts](http://www.frameweb.org/naturalproducts)
- [http://www.enterpriseworks.org](http://www.enterpriseworks.org)
- [http://www.bucknell.edu/Academics/Resources/The_Environmental_Center/about_the_center.html](http://www.bucknell.edu/Academics/Resources/The_Environmental_Center/about_the_center.html)

**Information**

- **International Resources Group**
- **FRAME** assessments inform decision makers of opportunities to decrease rural poverty by investing in improved institutions, training and legal frameworks that make producers more active and effective in natural product value chains. Assessments to develop case-specific solutions. In 2006, USAID/FRAME will undertake similar assessments in Ecuador and Madagascar in collaboration with USAID’s Microenterprise Development office. These assessments will go beyond “stock taking” to develop action plans and intervention strategies through participatory dialogue. Value chain actors can then implement these recommendations to enhance their competitiveness.

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**Ann Koontz**, Senior Program Advisor for EnterpriseWorksVITA, is an expert in small-scale enterprise development and enterprise-based biodiversity conservation. She has extensive experience in value chain analysis, organizational strengthening and market analysis to position small-scale producers in local and international markets. Ms. Koontz holds a BA in International Relations and a Master’s in Business Administration.

**Mike McGahuey** is a Senior Natural Resources Management Advisor in USAID’s Economic Growth Office, Agriculture and Trade Bureau, where he manages the FRAME program, the Soils Management Collaborative Research program, and the Integrated Soil Fertility Management program. He holds BS and MS degrees in Agronomy from Oregon State University.

**Dr. Peter Wilshusen** is co-director of the Bucknell University Environmental Center, where his current research activities focus on applying organizational and political theory to integrated biodiversity conservation and sustainable development programs. Dr. Wilshusen holds a PhD from the University of Michigan.

**Dr. Pradeep Tharakon** is IRG’s technical lead for USAID/FRAME’s natural product value chains assessments in Asia, Africa and Latin America. He has over a decade of experience in natural resource management, poverty-environment linkages and strategic environmental assessments. Dr. Tharakon holds a PhD in Environmental Science and graduate degrees in Business Administration, Public Policy and Forest Resource Management.
Natural Products and Rural Enterprises: Linking Economic Growth, Environmental Conservation and Rural Empowerment

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Natural products, defined as non-timber forest products (NTFPs) and non-traditional cultivated crops, represent an important source of income and subsistence for poor, rural households in developing nations. Additionally, natural products-based enterprises provide opportunities to promote sound environmental management practices, rural empowerment and good governance. However, efforts to leverage the full potential of the natural products sector face a variety of challenges, including improving community access to productive forests; sustainable management of the resource base; increasing production of wild-harvested products; ensuring consistent quality control; addressing market volatility; and assisting poor, isolated communities to meet strict global production standards.

Strengthening natural products enterprises to enable them to meet these challenges will require:

- decentralized, community-based resource management;
- local-level value-addition;
- access to microfinance;
- strong market information systems, trusted certification programs, and
- community-based rural enterprise development programs.

Natural Products – An Overview

Dr. Pradeep Tharakan explained the importance of NTFPs and non-traditional agricultural crops to rural populations. He presented a historical analysis of how perceptions about natural products have changed over time and how they are now considered ‘stepping stones’ to economic development.

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