

Fulfilling the Promise of Non-Timber Forest Products (NTFPs): A Case for Bridging the Science Gap in NTFP Policy

Ramon A. Razal

UPLB FI Science and Technology Professorial Chair and
Agriculture and Development Seminar Series Lecture
SEARCA, November 25, 2008

PRESENTATION OUTLINE:

- A. Scope and classification of NTFPs
- B. The Promise of NTFPs
- C. Bridging Gaps in NTFP Policy with Science
 - C.1 Status and Gaps in NTFP Policy
 - C.2 The Role of Science in NTFP Policy Process
- D. Conclusion and Recommendations

A. Scope and classification of NTFPs

Why the recent surge in interest in NTFPs?

- Increased realization of reliance of indigenous and rural peoples on these resources
- Using NTFPs is fashionable: it is considered to be “green” or “environment-friendly”
- contributes to achieving Sustainable Forest Management (SFM)



A. Scope and classification of NTFPs

What are NTFPs?

NTFPs comprise of biological resources other than timber, such as rattan, bamboo, resins, forest food plants, medicinal and cosmetic products that are derived from forests and related ecosystems. With reference to RA 9147, NTFPs can fall under the category of “economically important species” of wildlife.



A. Scope and classification of NTFPs

What NTFPs are not?

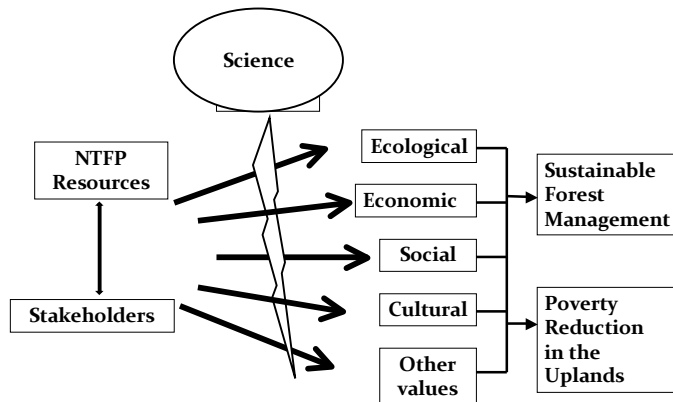
NTFPs are not classified as “agricultural” products. They are gathered or harvested from forestlands or related ecosystems without the benefit of intensive cultivation (timber, rattan versus “cash” and high value crops, vegetable, fiber, coconut, and “biofuels”).



Table 1. Relationship of plant type and area of growth with product classification in the Philippines.

		Forest trees		Fruit trees		Non-trees	
Forestlands	Wild/ Naturally- growing	Wood	Resins / Exudates	Wood	Wild fruits	Nipa Anahaw Vines Bamboo Rattan Medicinal plants	
	Cultivated/ planted	wood	Resins / Exudates	Wood	fruits	Nipa Anahaw Vines Bamboo Rattan Medicinal plants	Coconut Abaca Rubber Rice Corn Vegetables Banana Coffee
A&D Lands	Cultivated/ planted	wood	Resins / Exudates	Wood	fruits	Nipa Anahaw Vines Bamboo Rattan Medicinal plants	Coconut Abaca Rubber Rice Corn Vegetables Banana Coffee Etc.

-forest products; -non-timber forest products; -agricultural products



Framework: Policy gaps, how they affect the value of NTFPs, and a potential role for science.

A. Scope and classification of NTFPs

Objective of presentation:

To discuss how to mainstream NTFPs by filling the gaps in science for more appropriate policy formulation and decision-making relative to these forest resources.



B. The Promise of NTFPs

Contribution to rural households:

Food – bamboo shoots, *ubod*, yam (*kayos*), fruits (*katmon*, rattan), wild greens (*pako*, *himbabao*), mushrooms (*kurakding*), desserts (*sago*, *kaong*), oil (*talisay*), honey & other animal products, beverages



B. The Promise of NTFPs

Non-food uses:

- houses, temporary shelters
- mode of transport, foot bridges
- utensils, hunting tools and fishing implements
- cooking vessels and storage containers
- musical instruments
- communication medium
- religious, spiritual and cultural value



B. The Promise of NTFPs

Other non-food uses:

- resin as torch for illumination
- food wrappers
- washing hair
- personal adornment
- remedy for illnesses



B. The Promise of NTFPs

To meet cash economy:

- collection
- trade
- processing



Number of POs dependent upon NTFP Resources (Camacho *et al.*, 2007)

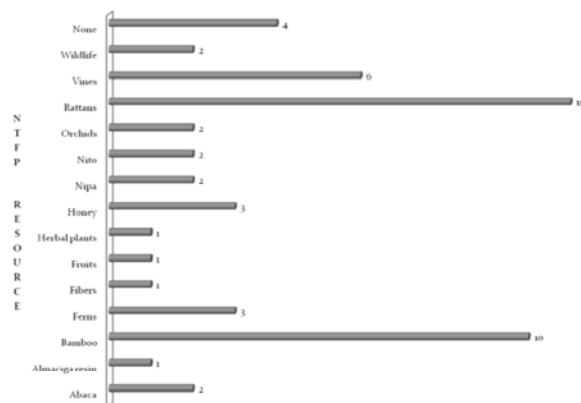


Table 2. Cost and returns of selected, short-term NTFP-based livelihood options (DENR, 1997).

Livelihood Option	Revenue (P)	Production Cost (P)	Fixed Cost (P)	Net Income (P)	Return on Total Investment
Papermaking from abaca	673,920	225,470	11,500	448,450	1.89
Making hammock from abaca	501,840	336,600	-	165,240	0.49
Hat weaving from buri	180,000	150,000	-	30,000	0.20
Bag weaving from buri	144,000	102,000	-	42,000	0.41
Hinggiw basket/tray making	360,000	74,820	-	285,180	3.81

Table 2. Cost and returns of selected, short-term NTFP-based livelihood options [continuation] (DENR, 1997).

Livelihood Option	Revenue (P)	Production Cost (P)	Fixed Investment (P)	Net Income (P)	Return on Total Investment
Rattan furniture making (180 chairs)	216,000	124,234	40,225	91,766	0.56
Rattan seedling production	120,000	73,350	-	46,650	0.63
Kaong weaving	43,200	25,740	-	17,460	0.68
Tiger grass (plantation & soffbroom)	14,665	11,242	-	3,423	0.30
Kaong harvesting	18,000	8,690	-	9,310	1.07
Wild fruit processing (per kg)	130	70	-	60	0.86
Butterfly farming	80,000	16,250	5,000	63,750	3

Table 3. Summary of the financial costs and benefits of selected NTFP-based enterprises that have a life of more than one year (DENR, 1997).

Livelihood option	PV of Net Income (@ 15%) (P)	Benefit-Cost Ratio (@ 15%)	Payback period (Years)	Year 1 production costs (P)	Project life (years)
Abaca plantation (per ha)	52,703	5.85	2	8,450	3
Salago fiber production (per ha)	14,392	1.14	4	18,844	8
Anahaw leaf production (per ha)	26,394	4.25	3	9,170	3
Shingle making from ambolong (per ha)	84,848	5	3	5,930	5

Table 3. Summary of the financial costs and benefits of NTFP-based enterprises that have a life of more than one year [continued] (DENR, 1997).

Livelihood option	PV of Net Income (@ 15%) (P)	Benefit-Cost Ratio (@ 15%)	Payback period (Years)	Year 1 production costs (P)	Project life (years)
Rattan plantation establishment (5 has)	118,318	4.53	12	8,800	14
Bamboo farming (per ha)	17,677	1.63	5	13,750	6
Deformed bamboo products (20 moulds)	59,304	7.55	2	6,580	5
Lemongrass plantation	108,000	2.62	1	24,400	4
Beekeeping	296,243	6.03	1	8,180	5

Fig. 2. Philippine rattan, bamboo and wood furniture exports, 2001-2006 (FMB-DENR, 2006.)

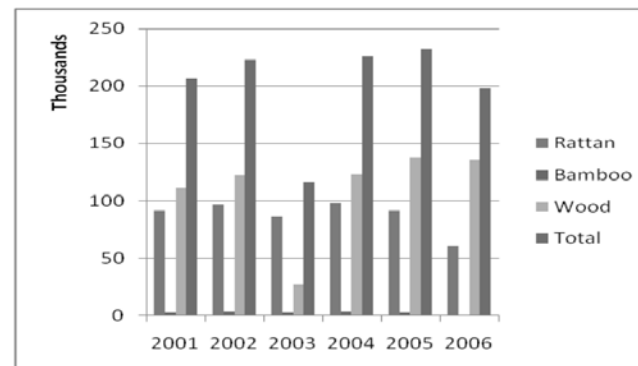


Fig. 3. Value of selected non-timber forest products exports, 2001-2006 (FMB-DENR, 2006).

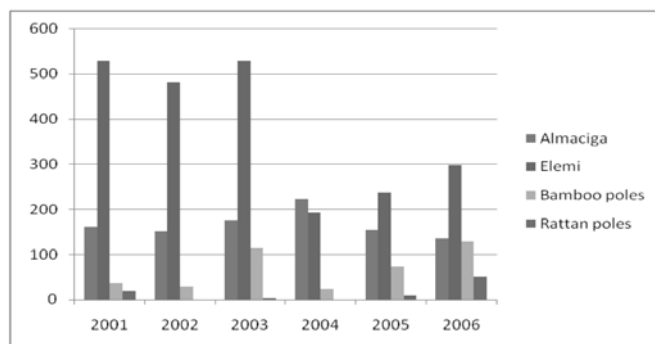
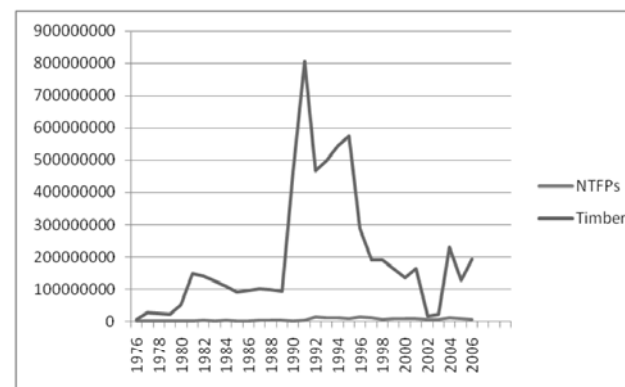
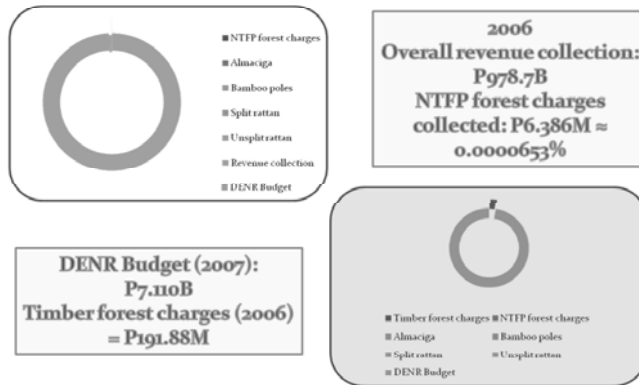


Fig. 4. Forest charges from timber and non-timber forest products, 1976-2006 (FMB-DENR, 2006).



NTFP Forest charges relative to 2007 Revenue collection and DENR Budget



Proposition:

Consider other options with respect to forest charges on NTFPs.

Forest charges on NTFPs are insignificant to government but sizeable to gatherers [cf. Revenue collection, DENR budget, amount paid to get CDM certification] (*Razal, 2008*).

They breed corruption (*Aquino 2007; Gatmaytan 2004; Guerrero, 2008*).

There is no correlation between amount paid and sustainability of resource (*Gatmaytan, 2004*).

What might happen if we do away with forest charges on NTFPs?

- NTFPs may be harvested and utilized (for as long as it is within AAC) by POs and IPs as a form of RUPES.
- Minimized and simplified requirements. (For as long as POs and IPs are registered, have an affirmed CRMF, an approved AWP, and an honest-to-goodness resource inventory [there are too many documents already!], on which to base AACs).
- More reasonable prices for raw materials, with benefits in the value chain passed on to the poorest participants in the chain.
- IPs and POs are relieved of some paper/follow-up work, freeing time that can be used for forest protection and development.

C. Bridging NTFP Policy Gaps with Science

NTFP policy gaps:

- No policy document exists that could apply to the whole range of NTFPs
- Inadequate, inconsistent, and inefficient
- Unnecessary, costly, and unfair
- Non-permanent, non-transparent, and do not guarantee rights

C. Bridging NTFP Policy Gaps with Science

NTFP policy gaps:

- **Some policies are flawed:**

- Do farmers have to make a choice between bamboo shoots and bamboo poles?
- Should processors be obliged to buy directly from gatherers?
- Should processing be closer to the source of raw materials or to the markets?

Fig. 5. Bamboo furniture and crafts market in San Carlos City, Pangasinan.



C. Bridging NTFP Policy Gaps with Science

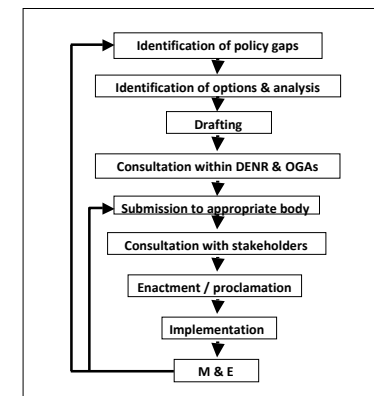
How can science help?

Influence NTFP policy by (Adams & Hairston 1996; IUFRO 2005):

- intervening in the process of policy formulation
- providing the basis for policy content
- helping evaluate implementation and effectiveness of policy



Fig. 6. Policy process in DENR (modified from Argete, 2004).



1. Intervene in policy formulation:

As a first step in being able to meaningfully participate in the NTFP policy process, NTFP scientists must reflect on whether government NTFP policies match avowed NTFP agenda.

As per Revised Forestry Master Plan:

“Government must assure the continued and sustainable supply of NTFPs, improve their harvesting and utilization, and establish and develop micro/cottage industries.”

2. Provide the basis for policy content.

Research that are relevant to NTFP policy issues

- inventory / assessment methods
- properties of plantation-grown NTFPs
- valuation of NTFPs
- value chain analysis
- sustainable harvesting volumes
- simplification of procedures
- efficient utilization and indigenous knowledge systems

3. Engage in assessing the impacts of policy.

Are assessment tools appropriate?

Are objectives being met?

What went wrong?

Where can science make a difference?

Conclusions:

NTFPs have enormous value, but man's continued enjoyment of these values is threatened.

There is a need to reform, or even overhaul, the policy environment for NTFPs.

Science can contribute to inform discussions and decision-making relative to NTFPs.

NTFP policies based on science-generated information can provide appropriate benchmarks for assessing their effectiveness.

NTFP policies need periodic assessment to be relevant and responsive to the needs of people dependent upon them.

Recommendations:

-Intensify the conduct of researches that can help resolve policy issues pertaining to NTFPs.

-Continue efforts to advocate for more rational, poor people-oriented, efficient NTFP policies. Conduct more fora on NTFPs and the benefits derived from them.

- Encourage better and more meaningful integration of NTFPs in Community Resource Management Framework and/or Ancestral Domain Management Plans/Ancestral Domain Sustainable Development and Protection Plan.

Recommendations:

-Continue efforts to build awareness and call attention to NTFPs, their status, values and the gaps in policy pertinent to their conservation, protection, utilization and development.

-Participate in dialogues that will help bring about better policies on NTFPs. Forest scientists must strive to engage themselves to serve such policy processes.

-Strengthen institutions (POs, NGOs, LGUs, CENROs) that deal with NTFP promotion, research, and development.

Recommendations:

-Provide technical support to communities and enterprises that use NTFPs as raw material inputs. Build capacity of NTFP-dependent people to organize and manage an enterprise.

-Upgrade wages of government personnel tasked with NTFP permitting, inspection, and monitoring responsibilities to minimize if not totally eliminate bribe-taking.

-Provide access to markets for NTFP raw materials and products.

THANK YOU!