

# Precious trees pay off – but who pays?

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## Introduction and History

Natural resources are inevitably placed at risk during political turmoil, social conflict and war. The political fallout in Madagascar during 2009 has resulted in its wildlife and flora suffering to an unprecedented extent. A recent government decree permits exportation of illegally-logged rosewood, thereby effectively legalizing illegality. Such contradictions connected with the exploitation of precious timber in Madagascar are nothing new: they can be traced back to previous events of decades ago, for example extraction of wood from the Zombitse protected area (pp. 145-148 Nicoll & Langrand 1989). The current frenzy of illegal rosewood extraction in north-eastern Madagascar has been erratically publicized since April 2009, and since October more detailed information has been revealed. Well in excess of 500 containers of rosewood were exported to China in late April 2009 (Débois 2009) and a recent survey conducted by Global Witness shows that this wood was sourced from protected areas (Lough 2009).

## Objectives

To prevent future forest destruction we must:

- Understand the dynamics of how Madagascar's forests have been impacted by political events.
- Understand why illegal timber extraction escalated so dramatically during a period when conservation efforts have never been as crucial.

## Methodology

Events during Madagascar's 2009 political turmoil progressed at great speed. Simultaneously, rampant illegal logging spread through officially protected north-eastern forests. People resident there collected information by:

- counting the trucks transporting rosewood;
- counting the rosewood logs in open depots, at confluences or in estuaries of rivers, as well as in towns, particularly north-eastern ports;
- counting and photographing containers packed with rosewood.

Most of the information gathered, including data on thousands of individuals involved in the rosewood traffic, has been recently published in local and international newspapers (ex. Débois 2009, Schuurman 2009). Because new depots will without doubt be discovered or named in the near future, figures provided on this poster are conservative, minimum estimates. The densities at which exploitable rosewood remains in the northeastern parks and reserves is poorly documented, but has recently been evaluated at no more than 5 trees per hectare, or as few as 1 tree per hectare. Where rosewood exploitation has already occurred, density is even less (Stasse 2002).

## Findings

- Marojejy National Park was heavily impacted by the illegal logging as early as January 2009. The same applies to Masoala National Park and Makira Natural Park (Figure 1).
- Thousands of poorly paid workers have been involved with the logging in these parks and reserves (Débois 2009), but only a few dozen persons are responsible for exporting the logs to China (Table 1).
- At least 571 containers of rosewood were exported from Vohemar to China in late April 2009 and a minimum of 300 containers have been shipped from Toamasina since March (Table 2).
- The government seized 91 containers of rosewood in October 2009.
- A minimum of 271 containers of rosewood await export in Vohemar.
- The minimum number of rosewood trees cut in the north-eastern protected areas is estimated at between 23,325 and 46,650 for Marojejy National Park and the northern sector of Masoala National Park, and an estimated minimum of 7,500 and 15,550 from Makira Natural Park and the southern sector of Masoala National Park (Table 2).
- The rosewood logs, or 'bola-bola', are painstakingly carried by astonishingly poorly paid workers to the nearest river, where they are bound together with lighter logs and floated downstream (Figure 2). To float one rosewood log downstream, four or five lighter trees must therefore be cut down within a park or reserve.
- With an optimal density of 5 exploitable rosewood trees per hectare in northern Madagascar, the total area impacted in Marojejy and northern Masoala is estimated at between 4,665 and 9,330 hectares, while illegal logging has affected between 1,500 ha in Makira Natural Park and 5,000 ha in southern Masoala National Park (Table 2).

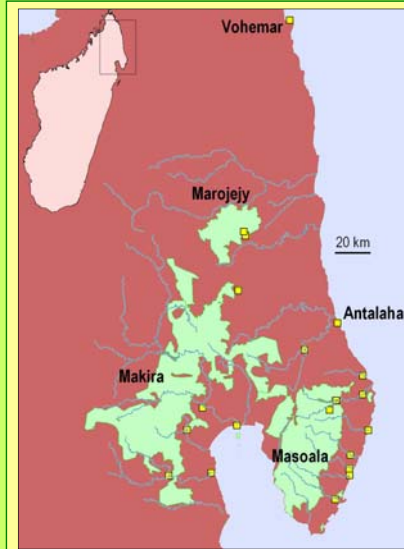


Figure 1. Parks heavily impacted by illegal logging in North-eastern Madagascar. Yellow squares show depots (confluences and estuaries of rivers) and some sites where rosewood trees are known to have been extracted.

Table 1. Recent activities in illegal rosewood logging in North-eastern Madagascar (numbers are minimal estimates).

Illegal rosewood loggers in the north-eastern Madagascar	City	Number of containers		Profits	Value of wood frozen in Vohemar	Comments
		January-April 2009	Held in Vohemar			
Jeannot RANJANORO	Antalaha	152	37	\$30,400,000	\$7,400,000	Head of traffic / nono@moov.mg
Roger THUNAM	Antalaha	103	45	\$20,600,000	\$9,000,000	Deputy head of traffic
Jean-Pierre LAISOA	Antalaha	81	33	\$16,200,000	\$6,600,000	
Claude BEZOKINY, Hôtel Palissandre	Antalaha	49		\$9,800,000		500 tons of rosewood waiting in a depot
Patricia SOA (LO SEING)	Antalaha	42	28	\$8,400,000	\$5,600,000	Jeannot Ranjanoro's sister
Thierry BODY	Antalaha	38	12	\$7,600,000	\$2,400,000	
Ramailison ARLAND	Antalaha	28	23	\$5,600,000	\$4,600,000	
Michel MALOHELY	Antalaha	21		\$4,200,000		
Martin BAMATANA	Antalaha	17		\$3,400,000		Former Deputy of Antalaha
CHAN LANE	Antalaha	17	30	\$9,400,000	\$6,000,000	
Grégoire NDAHINY	Antalaha	8		\$1,600,000		
William GUERRA	Antalaha	8		\$1,600,000		Tried to export ten containers of rosewood labeled "cloves"
Angelin BEFOTOTO	Antalaha	7		\$1,400,000		Presumed dangerous and armed
Victor BE, Hôtel Victoria	Sambava					Collects rosewood for Ranjanoro
Victor, Hôtel Bel Air	Sambava					
Maurice PAULA, Hôtel Ocean Momo	Antalaha					Collects rosewood for Thunam
Jacky MANAMBOLA	Antalaha					
Claudia BEZOKINY	Sambava					Collects rosewood for Thunam; Not related to Claude Bezokiny
Germaine FENOZANANY, Hôtel Melrose	Sambava					Sister in law of Ranjanoro; Collects rosewood for him
ABDOURAMANE	Sambava					Collects rosewood for Thunam; Presumed dangerous; now in jail
Rachid PATEL	Antalaha					
Eric FOENG	Antalaha					
Jao HASY	Antalaha					Former Agent of Water and Forest Dept. (2004-2006)
Jean Galbert BETSIAROANA, Ets. Kinga	Antalaha					'Cleaned' Sahamalaza forest claiming rosewood trees extracted were uprooted by a cyclone
Eugene SAM SOM MIOCK, Miraka	Toamasina	300		\$60,000,000		
<b>TOTALS</b>		<b>571</b>	<b>208</b>	<b>\$120,000,000</b>	<b>\$41,600,000</b>	



Figure 2. Rosewood being floated on a raft comprised of lighter trees (left): it takes on average 5 lighter trees to support the weight of one rosewood log on such rafts; a river on the Masoala Peninsula (top).

Table 2. Estimate of the numbers of rosewood trees illegally removed from north-eastern protected areas (\* exploitable tree density is estimated at 3-5 trees per ha inside protected areas only).

	Numbers	Weight (tons)	Number of logs	Min - Max number of trees*
Containers exported from Vohemar, April 2009	571	11,420	57,000	14,275 - 28,550
Containers held at Vohemar, October 2009	271	5,420	27,000	6,775 - 13,550
Containers seized on October 3rd	91	1,820	9,000	2,275 - 4,550
<b>Sub totals</b>	<b>933</b>	<b>18,660</b>	<b>93,300</b>	<b>2,325 - 46,650</b>
<b>Area impacted in Marojejy &amp; northern Masoala</b>				<b>4,665 - 15,550 hectares</b>
Containers exported from Toamasina, March 2009	300	6,000	30,000	7,500 - 15,000
<b>Area impacted in Makira &amp; southern Masoala</b>				<b>1,500 - 5,000 hectares</b>



Piles of rosewood logs in Antalaha (March 2009)



Bleeding stump of a recently cut rosewood in northeastern Madagascar, as described by Débois (2009).

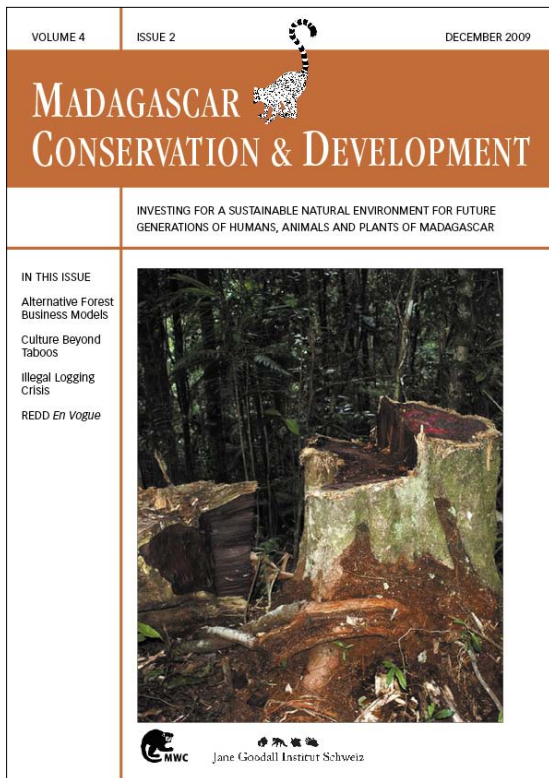
## The unanswered questions

- Could illegal logging in the protected areas have been prevented? If so, how?
- How can the forests of Madagascar benefit local communities without having to be pillaged?
- What can be done with the precious timber that has been seized?
- What can be done to boost conservation efforts given Madagascar's current political climate?
- Which measures should be undertaken to safeguard the remaining forests from illegal timber extraction?

## References

Débois, R. 2009. La fièvre de l'or rouge saigne la forêt malgache. Unvers Maore 13: 8-15.  
 Lough, R. 2009 Madagascar accused of profiting from illegal timber. Reuters 3 October 2009.  
 Mustoe, S.H., Capper, D.R., Lowen, J.C., Leadley, J.D., & Rakotomalala, D. 1998. Zombitse-Vohibasia: a new national park in south-west Madagascar. Bulletin of the African Bird Club 5: 39-45.  
 Nicoll, M.E. & Langrand, O. 1989. Madagascar: Revue de la conservation des aires protégées. WWF, Gland, Switzerland.  
 Schurman D. 2009. Illegal logging of rosewood in the rainforests of northeast Madagascar. TRAFFIC Bulletin 22(2): 49.  
 Stasse, A. 2002. La filière bois de rose. Région d'Antalaha - Nord-est de Madagascar. Unpublished report to Ministère des Eaux et Forêts de Madagascar.

The position of key international organizations regarding illegal logging in Madagascar's protected areas is clearly stated in a recent press release (see printed copy available below).



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