European Commission

# Timber Trade Flows within, to and from Eastern and Southern African Countries

## Final Report

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# Abbreviations

| | |
|---|---|
| AFF | African Forest Forum |
| CBD | Convention on Biological Diversity |
| cif | cost, insurance and freight |
| CITES | Convention of International Trade in Endangered Species |
| CMS | Convention on Migratory Species |
| COMTRADE | United Nations Commodity Trade Statistics Database |
| DRC | Democratic Republic of Congo |
| EAC | East African Community |
| EC | European Commission |
| EU | European Union |
| EUTR | European Timber Trade Regulation |
| FAO | Food and Agriculture Organization of the United Nations |
| FSC | Forest Stewardship Council |
| FLEGT | Forest Law Enforcement, Governance and Trade Action Plan |
| fob | free on board |
| ha | hectare |
| ICRAF | International Council for Research on Agroforestry |
| ITTO | International Timber Trade Organization |
| $m^3$ | Cubic metre |
| NGO | Non-Governmental Organization |
| RWE | Round Wood Equivalent |
| TRAFFIC | The Wildlife Trade Monitoring Network |
| TWICO | Tanzania Wood Industries Corporation |
| RSA | Republic of South Africa |
| UAE | United Arab Emirates |
| UN | United Nations |
| UNFCCC | United Nations Framework Convention on Climate Change |
| UNCCD | United Nation Convention to Combat Desertification |
| UNCED | United Nations Convention on Environment and Development |
| UNEP | United Nations Environmental Programme |
| USD | United States Dollar |
| VPA | Voluntary Partnership Agreement |
| WWF | World Wide Fund for Nature |

# Executive Summary

In response to the widespread illegal logging that is going on in Africa, the European Commission has introduced FLEGT, the Forest Law Enforcement, Governance and Trade Action Plan, to provide a set of measures to prevent illegally harvested timber from reaching the European markets. It therefore becomes important to understand the dynamics of the timber trade flows in Eastern and Southern Africa and identify the potential interest that individual countries might have in improving forest management and entering into VPAs.

This study has considered 12 specific countries in Eastern and Southern Africa region, namely Botswana, Burundi, Kenya, Madagascar, Malawi, Mozambique, Rwanda, South Africa, Tanzania, Uganda, Zambia and Zimbabwe in order to provide an overview of recent trends in timber flows within and between those countries and from the study countries to other markets. In addition, the study has also provided anecdotal information on undocumented and illegal harvesting and trade within the study countries. The focus has been on the governance of the forest sector.

**The forest resources** of the studied countries have been estimated at 181 million ha in 2010 (FAO, 2010). In recent years, extensive forest areas have been converted to agriculture or lost to shifting cultivation in Mozambique and Zambia as well as elsewhere. It is the same with uncontrolled charcoal making, taking place in all countries, except South Africa. This extensive loss of forest covers taking place in the slow growing indigenous forests is to some extent being compensated by the expansion of faster growing forest plantations and the growing of trees on farms.

**Forest management** has in many of the study countries all too often had a focus on timber extraction, where cash strapped authorities have turned to the forest to generate revenue and income, in the short term. The result has been overharvesting with little thought to regeneration and replanting, with the exception of South Africa having sustainably managed forest plantations. While the above can be attributed to mismanagement, the forests of the study countries have also suffered from severe over exploitation, of the indigenous forests as well as the plantations, again with the exception of South Africa,

**Legislation** requires that harvesting shall begin with the issuing of a harvesting license, be it for a single tree, a specific compartment or a concession. These licenses should specify the physical location of the trees to be harvested, the tree species, the estimated volume, and usually also the revenue to be paid. However, there are many examples from the study countries demonstrating that the control of harvesting is poor, ineffective or absent, leaving the forest wide open to exploitation.

**The forest industry** is very much in decline, except in South Africa. The industry had a much higher capacity many years ago, but has gradually deteriorated due to a shortage of raw material of the desired quality as a result of deforestation and mismanagement, preventing any further investments in equipment. In the study countries, however, South Africa has been able to create a well-developed and competitive wood industry, linked to a well-managed estate of tree plantations, the largest in Africa. The experience is that an efficient and competitive forest-based industry can only develop successfully as long as there is a strong link between the industrial production system and a reliable and sustainable raw material base.

**The local demand** for wood-based products is high in all the study countries, and increasing with increasing populations, urbanisation and higher incomes. Prices have therefore been going up on all local markets. A particularly high demand is coming from a booming construction industry, where in many countries there is a high demand for building poles, of eucalyptus. There is extensive importation of paper into all countries of the region, which involves high values. Fuelwood, or firewood and charcoal combined, is for the ordinary citizen of the study countries the most important forest product, accounting for a very high share of the demand and consumption of wood.

**The forest administrations** in the study countries are all quite traditional and go back to the colonial days, when a forest department typically was established to look after the interest of the government, as the land owner. These forest departments have survived almost unchanged until the present day, having maintained field organizations that follow the administrative boundaries of the respective country. In recent years changes have been seen in that sectors reforms have taken place in a few countries, notably in East Africa where there now are forest services that are more autonomous from government, being responsible for the overall management.

**Governments** are responsible for the formulation of policies and legislation that regulate procedures and management standards for the forest sector, and determine responsibilities among various actors and stakeholders in the sector. The governments of the study countries, with the exception of South Africa, "own" most of the forest resources and must therefore also provide the resources required for management, maintenance and investment. Here, there is most often an imbalance between what has been planned and what can be implemented.

**Export of forest products** is regulated in detail in the study countries and requires that a number of more or less standardized steps are followed, to secure an export license or export permit. In some countries, wood products are seen as 'restricted products', which requires an export permit to enable export. Although logs are usually not allowed to be exported, logs can still be exported from some countries if there is a special license from the respective forest department. On the other hand, none of the countries are having import restrictions on wood based products, or require any information about origin of the imported forest products.

**The timber trade** is to some extent being driven by the fact that some countries are being dependent on others for the supply of wood-based products, as there is quite a difference in the extent of forest resources in different countries. This trade is both legal as well as illegal. In recent years the tree plantations of the study countries have become a most important source to satisfy demand, not only locally. The indigenous hardwood species are by tradition still in high demand, although the supply from easily accessible areas is running out, leading to high prices. Traded products cross country borders between the study countries at border-posts established at highways and roads, as well as between such border-posts to avoid customs procedures. Smuggling of goods also takes place across certain rivers forming borders and across lakes.

**The export of wood-based products to the EU-27:** Of the study's 12 countries, only South Africa exports substantial quantities of wood-based products to the EU, with almost all of these wood-based products deriving from plantations in South Africa and most of these are FSC-certified. The EU is unlikely to import substantial quantities of wood-based products indirectly from the study countries. Consequently, neither direct nor indirect trade with the EU are likely to provide the EC with a strong negotiating position concerning prospective VPAs with any of the 12 countries.

**The export of wood-based products to countries outside of Africa:** Mozambique exports a much larger quantity of tropical timber than any of the other study countries. It does so predominantly to China. Other countries in East Asia import small quantities of tropical timber from the study countries. China is significant also as a destination for the tropical sawnwood exports of Tanzania and Zambia. India imports substantial volumes of sawn wood from Tanzania and, after transit through Uganda and presumably Kenya, South Sudan. South Africa supplies the great majority of the wood-based products which the study countries export. Most of this is exported to the paper sector in East Asia and derives from FSC-certified plantations.

**The export of wood-based products to countries elsewhere in Africa:** The study countries tend to export only small quantities of wood-based products to countries elsewhere in Africa, mainly to neighbouring

countries. Most of this derives from plantations. Zambia exports substantial volumes of logs and sawn wood to DR Congo. Islands in the Indian Ocean, particularly La Réunion and Mayonette, account for most of the substantial volumes of plantation-grown wood which Madagascar exports. Tanzania started to export plantation wood to Kenya in 1999 when the plantations in Kenya were closed to harvesting. Paper supplied from South Africa accounts for most of the roundwood equivalent volume of paper sector products which is exported from the study countries to destinations elsewhere in Africa. Kenya is the only other study country which exports significant quantities of paper to those countries, and does so primarily to DR Congo. South Africa exports a very much greater quantity of wood-based products than the other study countries. Malawi has a large plantation estate and is exporting timber to neighbouring countries. DR Congo puts wood products on the market but the flow of timber from DR Congo seems to depend on the security situation in that country.

**The export of wood-based products from study countries to other study countries**: Most of the wood-based products that are traded between the study countries derive from plantations. Most of this comprises logs (including poles), sawn wood and paper. Substantial volumes of sawn wood are supplied from South Africa to Mozambique, from both Tanzania and Malawi to Kenya, and from Zimbabwe to Botswana and South Africa. Substantial undeclared volumes of sawn wood are supplied from Mozambique to Malawi and Tanzania, including for onward export. It seems that increasing volumes of sawn timber from the North of Mozambique are transiting to other destinations through Tanzania. Most trade in paper sector products between the study countries is supplied from South Africa. The only fuel wood (charcoal) that is traded between the study countries in substantial quantity is supplied from Zimbabwe to South Africa.

**Timber tracing is** not being practised in any of the study countries, with the exception of South Africa, where there are systems and procedures in place to trace the origin of timber, as all harvested logs are given a digital code. Modern, electronic tracking systems are available, although a bit complicated and costly. Considering that the cross-border trade between the study countries is quite extensive, the introduction of a regional tracking system seems essential to bring in control of this trade.

**Certification** has only included a few individual forests outside of South Africa, in Madagascar, Mozambique, Tanzania and Uganda, all under the FSC system. Seen in its totality only very small areas have been affected. In South Africa, again, the picture is the opposite with almost all tree plantations having been certified.

**The European Union**, through the FLEGT initiative, is not in a strong position to push for change and enter into negotiations over VPAs in individual countries, as the European markets are only of little relevance for the export of wood products from the study countries, except South Africa. Still, the EU can influence the debate and make high government officials aware of what goes on in the sector and argue for the benefit of reform. Mozambique, Madagascar and Zambia would then be high on the list.

**The international community** is well aware of what is taking place, but there is no international mechanism in place to stop the on-going destruction of the African forests. It is all up to the responsible governments in the countries being targeted to address what is going on, which in turn requires a political will to do so.

**Illegal activities** are wide spread and there are many examples from individual counties of not only illegalities, but also of poor forest management practices. Further examples can be found in studies conducted by donors, international organizations and NGOs. The following common examples can be cited:

- Forest management regulations are not followed; replanting of clear felled areas is not taking place, thinning and pruning are not done
- Illegal logging is wide spread; pit sawing, creaming of valuable tree species, overuse of forest concessions, cutting of protected trees

- Abuse of harvesting licenses; higher volumes are cut, harvesting takes place outside of given areas
- Ineffective revenue collection; under recording of volumes and wood quality
- Transportation of forestry products without permits, or with faked permits
- Destruction and loss of forested areas; for agriculture, charcoal making, tobacco growing and drying
- Irregularities at border crossings and in the handling of customs declarations.

Illegalities and the non-paying of fees and revenues, or reduced payments, means that governments are losing enormous amounts of revenue, to finance much needed operations and investments in the sector.

**Observations and Recommendations:** The key problem affecting the forestry sector is weak governance and poor law enforcement, which enables illegal harvesting, trade and export of wood based products to flourish.

However, the volume of trade in timber-based products between the countries in this study and the EU-27 does not warrant efforts to establish VPAs. Still, in about half of the countries studied (Mozambique, Tanzania, Zambia, Madagascar and Uganda), illegal logging, to supply the markets of China as well as domestic markets in the region, is a serious problem, which justifies EU support to provide a preliminary analysis of the situation.

Although there are excellent policies and workable regulations in place, these are not followed or are being abused. There is not an absence of detailed regulations, but a lack of commitment and resources to enable implementation of these frameworks, i.e. there is in practise not a well-adjusted balance between what is required and what can be implemented and enforced.

In countries like Mozambique and Zambia, where forest management virtually has collapsed, it is sad to see what is allowed to take place. This in turn goes back to the direct involvement of government officials and politicians in illegal logging and illegal timber export, which means that there is an absence of political will to interfere and introduce change.

Revenue collection in the sector must be improved, by entrusting the handling of fees and payments to authorities outside of the sector. Prices and taxes of forest based products are not adjusted to market realities and actual costs, so pricing studies are needed. The systems available for the tracing and tracking of timber should be put to use, to be operated from outside of the sector. Local communities should be invited to participate in the management and protection of forest resources, and then also be allowed to benefit. Management objectives of individual forests should be reviewed, and possibilities of privatization looked into.

The approach must be to identify and address all the weak spots and take a comprehensive grip that can take in the totalities, not only isolated issues of mismanagement.

## Résumé Opérationnel

En réponse à l'exploitation forestière illégale très répandue qui se passe en Afrique, la Commission européenne a mis en place FLEGT, l'action d'application des réglementations forestières, de gouvernance et de commerce, afin de fournir un ensemble de mesures visant à empêcher le bois récolté illégalement d'atteindre les marchés européens. Il devient donc important de comprendre la dynamique des flux commerciaux de bois en Afrique orientale et australe et d'identifier l'intérêt potentiel que chaque pays pourrait avoir dans l'amélioration de la gestion des forêts et de conclure des Accords de Partenariat Volontaires (APV).

Cette étude a examiné 12 pays spécifiques dans la région d'Afrique de l'Est et australe, à savoir le Botswana, le Burundi, le Kenya, Madagascar, le Malawi, le Mozambique, le Rwanda, l'Afrique du Sud, la

Tanzanie, l'Ouganda, la Zambie et le Zimbabwe dans le but de donner un aperçu des tendances récentes en flux de bois de construction à l'intérieur et entre ces pays et des pays de l'étude à d'autres marchés. En outre, l'étude a également fourni des informations anecdotiques sur la récolte sans papiers et illégale et le commerce dans les pays de l'étude. L'accent a été mis sur la gouvernance du secteur forestier.

**Les ressources forestières** des pays étudiés ont été estimées à 181 millions d'hectares en 2010 (FAO, 2010). Ces dernières années, de vastes zones forestières ont été converties à l'agriculture ou perdues à la culture itinérante au Mozambique et en Zambie comme ailleurs. C'est la même chose avec la fabrication de charbon, qui a lieu dans tous les pays, à l'exception de l'Afrique du Sud. Cette perte importante de couverts forestiers qui ont eu lieu dans les forêts naturelles à croissance lente est dans une certaine mesure compensée par l'expansion de plantations forestières à croissance plus rapide et par la culture d'arbres dans les exploitations agricoles.

**La gestion des forêts** dans tous les pays de l'étude a trop souvent eu l'accent sur l'extraction de bois, où les autorités monétaires à court d'argent se sont tournées vers la forêt afin de générer des revenus au court terme. Le résultat a été la surexploitation sans penser à la régénération et au reboisement a l'exception de l'Afrique du Sud qui gère de manière durable ses plantations forestières. Alors que ce qui précède peut être attribué à une mauvaise gestion, les forêts - naturelles ainsi que les plantations - des pays de l'étude ont également souffert de surexploitation sévère.

**La loi** exige que la récolte doive commencer par la délivrance d'un permis de récolte, que ce soit pour un seul arbre, un compartiment particulier ou une concession. Ces licences doivent indiquer l'emplacement physique des arbres à récolter, les espèces d'arbres, le volume estimé, et généralement aussi le revenu à payer. Cependant, il existe de nombreux exemples de pays de l'étude qui démontrent que le contrôle de la récolte est mauvais, inefficace ou absent, laissant la forêt grande ouverte à l'exploitation.

**L'industrie forestière** subit un déclin, sauf en Afrique du Sud. L'industrie avait une capacité beaucoup plus élevée il y a plusieurs années, mais s'est progressivement détériorée en raison d'une pénurie de matières premières de la qualité voulue à cause de la déforestation et d'une mauvaise gestion, empêchant tout investissement supplémentaire en équipements. Dans les pays étudiés, cependant, l'Afrique du Sud a réussi à créer une industrie du bois bien développée et compétitive, liée à un domaine bien géré de plantations d'arbres, parmi les plus importants des gouvernements en Afrique. Il n'y a aucun doute qu'une industrie du bois très développée et concurrentielle nécessite une intégration efficace du système de production industriel avec une base de matière première fiable et durable.

**La demande locale** de produits dérivés du bois est élevée dans tous les pays étudiés, et accroit avec l'augmentation des populations, l'urbanisation et l'augmentation des revenus. Les prix ont donc été à la hausse sur tous les marchés locaux. Une demande particulièrement élevée provient d'une industrie de la construction en plein essor, où dans de nombreux pays il existe une forte demande pour les poteaux de construction d'Eucalyptus. Il y a une vaste importation de papier dans tous les pays de la région, ce qui implique des valeurs élevées. Le bois de chauffage - une combinaison de bois de chauffage et de charbon de bois - est pour le citoyen ordinaire des pays de l'étude le produit forestier le plus important, qui représente une part très importante de la demande et de la consommation de bois.

**Les administrations forestières** dans les pays de l'étude sont toutes assez traditionnelles et remontent à l'époque coloniale, lorsqu'un département forestier était créé typiquement pour s'occuper de l'intérêt du gouvernement, en tant que propriétaire du terrain. Ces services forestiers ont survécu jusqu'à nos jours, avec une organisation sur le terrain suivant les limites administratives du pays concerné. Ces dernières années, des changements ont été observés tels que des réformes sectorielles dans quelques pays, notamment en Afrique de l'Est où il y a maintenant des services forestiers qui sont plus indépendants du gouvernement, qui est responsable de la gestion globale.

**Les gouvernements** sont responsables de la formulation des politiques et des lois qui régissent les procédures et les normes de gestion pour le secteur forestier, et de déterminer les responsabilités entre les différents acteurs et intervenants dans le secteur. Les gouvernements des pays de l'étude, à l'exception de l'Afrique du Sud, «possèdent» la plupart des ressources forestières et doivent donc également fournir les ressources nécessaires à la gestion, l'entretien et l'investissement. Ici, il existe souvent un déséquilibre entre ce qui a été prévu et ce qui peut être mis en œuvre.

**L'exportation de produits forestiers** est réglementée en détail dans les pays étudiés et nécessite qu'un certain nombre d'étapes plus ou moins standardisées soient suivies, afin d'assurer une licence ou un permis d'exportation. Dans certains pays, les produits du bois sont considérés comme des «produits restreints», qui nécessitent une licence d'exportation pour permettre l'exportation. Bien que les rondins ne soient généralement pas autorisés à être exportés, ils peuvent encore être exportés à partir de certains pays s'il y a une autorisation spéciale du département de forêt respectif. D'autre part, aucun des pays ne présente de restrictions à l'importation sur les produits à base de bois, ou ne requiert d'informations sur l'origine des produits forestiers importés.

**Le commerce du bois** est dans une certaine mesure motivée par le fait que certains pays sont dépendants des autres pour la fourniture de produits dérivés du bois, car il y a une grande différence entre l'étendue des ressources forestières dans les différents pays. Ce commerce est à la fois légal et illégal. Ces dernières années, les plantations d'arbres des pays de l'étude sont devenues une source importante pour satisfaire la demande, et pas seulement au niveau local. Les espèces de bois dur locales sont traditionnellement très recherchées bien que l'alimentation des zones facilement accessibles est épuisée donnant ainsi lieu à une augmentation des prix. Des produits commerciaux franchissent les frontières nationales entre les pays de l'étude aux postes de frontière établis aux autoroutes et routes, ainsi qu'entre ces frontières afin d'éviter les procédures douanières. La contrebande de marchandises a également lieu à certains lacs et rivières qui forment des frontières.

**L'exportation de produits de bois vers l'UE-27**: Parmi les 12 pays de l'étude, seule l'Afrique du Sud exporte des quantités importantes de produits dérivés du bois à l'UE, avec la quasi-totalité de ces produits à base de bois provenant de plantations en Afrique du Sud et la plupart sont certifiés FSC. L'UE a peu de chances d'importer indirectement d'importantes quantités de produits dérivés du bois partir des pays de l'étude. Par conséquent, ni le commerce direct ou indirect avec l'UE sont susceptibles de fournir à la CE une forte position de négociation concernant les accords de partenariat volontaires potentiels avec n'importe lequel des 12 pays.

**L'exportation de produits de bois vers des pays hors de l'Afrique**: Le Mozambique exporte une quantité beaucoup plus importante de bois tropicaux que tous les autres pays étudiés. Il le fait principalement vers la Chine. D'autres pays d'Asie de l'Est importent de petites quantités de bois tropicaux provenant des pays étudiés. La Chine est importante aussi en tant que destination pour les exportations de sciages tropicaux de la Tanzanie et de la Zambie. L'Inde importe d'importants volumes de bois de sciage de la Tanzanie et (qui transite sans doute par l'Ouganda et le Kenya) au Sud-Soudan. L'Afrique du Sud fournit la grande majorité des produits à base de bois qu'exportent les pays de l'étude. La plupart de ceci est exporté vers le secteur du papier en Asie de l'Est et provient de plantations certifiées FSC.

**L'exportation de produits de bois vers les autres pays d'Afrique**: Les pays étudiés ont tendance à n'exporter que de petites quantités de produits dérivés du bois aux autres pays d'Afrique, principalement dans les pays voisins. La plupart de ceci découle de plantations. La Zambie exporte des volumes importants de grumes et bois sciés en RD Congo. Les Iles de l'Océan Indien, en particulier de La Réunion et Mayotte importent un volume considérable de bois de plantation provenant de Madagascar. La Tanzanie a commencé à exporter du bois de plantation au Kenya en 1999, lorsque les plantations au Kenya furent

fermées à la cueillette. Le papier fourni par l'Afrique du Sud représente la majeure partie de l'équivalent bois rond du volume des produits du secteur du papier qui est exporté depuis les pays de l'étude vers d'autres destinations en Afrique. Le Kenya est le seul autre pays de l'étude qui exporte des quantités importantes de papier pour ces pays, et ce, principalement à la RD Congo. L'Afrique du Sud exporte une quantité beaucoup plus importante de produits dérivés du bois que les autres pays étudiés. Le Malawi présente d'importantes plantations et exporte du bois vers les pays voisins. La République démocratique du Congo met les produits du bois sur le marché, mais le flux de bois de la RD Congo semble dépendre de la situation sécuritaire dans ce pays.

**L'exportation de produits dérivés du bois en provenance des pays de l'étude à d'autres pays de l'étude**: La plupart des produits à base de bois qui sont échangés entre les pays de l'étude proviennent de plantations. La plupart de ceux-ci comprennent des rondins (y compris les bâtons), des bois sciés et du papier. D'importants volumes de bois scié sont fournis par l'Afrique du Sud au Mozambique, par la Tanzanie et le Malawi au Kenya, par le Zimbabwe au Botswana et en Afrique du Sud. D'importants volumes de bois scié non déclarés sont fournis par le Mozambique au Malawi et en Tanzanie, y compris pour l'exportation en avant. Il semble que des volumes croissants de bois de sciage du nord du Mozambique sont en transit vers d'autres destinations à travers la Tanzanie. Le commerce des produits du secteur du papier entre les pays de l'étude est réalisé par l'Afrique du Sud. Le seul bois de chauffage (charbon de bois) qui soit vendu entre les pays de l'étude en quantité importante est exporté du Zimbabwe en Afrique du Sud.

**Le traçage de bois** n'est pratiqué dans aucun des pays à l'étude, à l'exception de l'Afrique du Sud, où il existe des systèmes et des procédures en place pour retracer l'origine du bois, étant donné que toutes les grumes récoltées reçoivent un code numérique. Des systèmes modernes de surveillance électronique sont disponibles, bien qu'un peu compliquées et coûteux. Considérant que le commerce transfrontalier entre les pays de l'étude est assez vaste, l'introduction d'un système de suivi régional semble indispensable afin de mettre ce commerce sous contrôle.

**La certification** a seulement inclus quelques forêts individuelles en dehors de l'Afrique du Sud, à Madagascar, au Mozambique, en Tanzanie et en Ouganda, le tout sous le système FSC. Dans l'ensemble, seulement de très petites zones ont été touchées. En Afrique du Sud, encore une fois, l'image est à l'opposé avec la quasi-totalité des plantations d'arbres ayant été certifiées.

**L'Union européenne**, par le biais de l'initiative FLEGT, n'est pas en position de force pour pousser au changement et conclure des négociations sur les APV dans les différents pays, étant donné que les marchés européens ne sont que de faible importance pour l'exportation de produits de bois des pays étudiés, à l'exception de l'Afrique du Sud. Pourtant, l'UE peut influencer le débat et mettre les hauts fonctionnaires au courant de ce qui se passe dans le secteur et argumenter en faveur de la réforme. Le Mozambique, Madagascar et la Zambie seraient ainsi haut placés sur la liste.

**La communauté internationale** est bien consciente de ce qui se passe, mais il n'existe aucun mécanisme international mis en place pour arrêter la destruction en cours des forêts africaines. Il revient aux gouvernements responsables de chacun des pays ciblés de s'attaquer à ce qui se passe ; autrement dit, cela nécessite donc une volonté politique.

**Les activités illégales** sont largement répandues et il existe de nombreux exemples tirés de différents comtés non seulement d'illégalités, mais aussi de mauvaises pratiques de gestion forestière. On retrouve d'autres exemples dans les études menées par les bailleurs de fonds, les organisations internationales et les ONG. Les exemples communs suivants peuvent être cités:

- Les règlementations de gestion des forêts ne sont pas respectés; la replantation des coupes rases n'est pas mise en œuvre, l'éclaircissage et l'élagage ne sont pas faits ;

- L'exploitation forestière illégale est très répandue; le sciage de long, l'écrémage des essences précieuses, la sur-utilisation des concessions forestières, l'abattage des arbres protégés ;
- L'abus de permis de récolte; des volumes plus élevés sont coupés, la récolte a lieu en dehors des zones indiquées ;
- La collecte inefficace des recettes; l'enregistrement faussé des volumes et de la qualité du bois ;
- Le transport des produits forestiers sans permis, ou avec de faux permis ;
- La destruction et la perte de zones forestières, par l'agriculture, la fabrication de charbon de bois, la culture et le séchage du tabac ;
- Irrégularités aux frontières et dans le traitement des déclarations en douane.

Les illégalités et le non-paiement des taxes et des recettes ou des paiements réduits, signifie que les gouvernements perdent d'énormes quantités de revenus pour financer les opérations et les investissements indispensables dans le secteur.

**Observations et recommandations**: Le problème principal affectant le secteur forestier est la mauvaise gouvernance et l'application défaillante des lois, ce qui permet à l'exploitation, au commerce et à l'exportation illégaux de produits à base de bois de s'épanouir.

Toutefois, le volume des échanges de produits à base de bois entre les pays de l'étude et de l'UE-27 ne justifie pas les efforts pour établir des APV. Cependant, dans près de la moitié des pays étudiés (Mozambique, Tanzanie, Zambie, Madagascar et l'Ouganda), l'exploitation forestière illégale, pour approvisionner les marchés de la Chine ainsi que les marchés domestiques de la région, est un problème grave, qui justifie le soutien de l'UE à fournir une analyse préliminaire de la situation.

Bien qu'il existe d'excellentes politiques et réglementations réalisables en place, celles-ci ne sont pas respectées ou sont abusivement appliquées. Ce n'est pas l'absence de règles précises qui empêche la mise en œuvre de ces cadres, mais un manque d'engagement et de ressources. En d'autres termes, il n'existe pas en pratique d'équilibre bien ajusté entre ce qui est nécessaire et ce qui peut être mis en œuvre et appliqué.

Dans des pays comme le Mozambique et la Zambie, où la gestion forestière s'est pratiquement effondrée, il est triste de constater ce qui s'y passe. Cela est directement lié à l'intervention des représentants du gouvernement et des hommes politiques dans l'exploitation forestière et l'exportation illégale de bois. Cela signifie donc l'absence de volonté politique d'intervenir et d'introduire des changements.

Il est urgent d'entreprendre des réformes dans ce secteur. Pour aller de l'avant dans le secteur forestier, il n'y a pas de nécessité d'adopter de nouvelles politiques et de nouvelles lois, mais simplement d'une volonté et de ressources nécessaires pour mettre en œuvre la vision exprimée par ces documents. La perception des recettes dans le secteur doit être améliorée, en confiant la gestion des frais et les paiements aux autorités externes à ce secteur. Les prix et taxes des produits forestiers de base ne sont pas ajustés aux réalités du marché et aux coûts réels, imposant ainsi une étude de prix. Les systèmes disponibles pour le traçage et le suivi des bois doivent être mis à profit, pour être utilisés à l'extérieur du secteur. Les communautés locales devraient être invitées à participer à la gestion et à la protection des ressources forestières, et pouvoir également en bénéficier. Les objectifs de gestion des forêts individuelles devraient être révisés, et les possibilités de privatisation devraient être examinées également.

L'approche proposée est d'identifier et d'aborder les points faibles de façon à pouvoir résoudre l'ensemble des problèmes de mauvaise gestion et non pas les problèmes isolés.

# 1. Introduction

This study of timber flows within, to and from countries in Eastern and Southern Africa is most timely in that widespread illegal logging in recent years has had a devastating effect on the valuable forest resources in this Region of Africa, which has had not only environmental consequences but also economic and social ones.

The response by the European Commission has been the introduction of FLEGT, the Forest Law Enforcement, Governance and Trade Action Plan, to provide a set of measures to prevent illegally harvested timber from reaching the European markets. Under FLEGT, the European Commission has so far entered into Voluntary Partnership Agreements, VPA, with five countries in Central and West Africa (Cameroon, Central African Republic, Ghana, Liberia and Republic of Congo) to provide verification that timber products from these countries being imported into Europe have been harvested legally. With the European Union Timber Regulation, EUTR, the placing of illegal timber on the European market has been prohibited starting from 3 March 2013.

Against this background, it becomes important to understand the dynamics of the timber trade flows also in Eastern and Southern Africa, including the volume and value of the trade, within, to and from these countries, and the potential interest that individual countries might have in improving forest management and entering into VPAs. This study has therefore identified many burning issues that need to be addressed to prevent illegal logging and trade in illegally harvested products.

# 2. The Assignment

This assignment has followed an objective consisting of two main parts:

1. To provide a baseline of the wood based trade flow information in the region
2. To provide an overview and analysis of the regulatory framework for timber production, processing and trade in 9 countries.

The first objective was to provide a baseline for timber trade flow information within, to and from 11 countries in Eastern and Southern African. The study therefore considered the following specific countries; Botswana, Burundi, Kenya, Madagascar, Mozambique, Rwanda, South Africa, Tanzania, Uganda, Zambia and Zimbabwe, plus Malawi, and has provided an overview of recent trends in timber flows:

i) within and between those countries,

ii) from the study countries to other markets,

iii) from other regions to this region.

In addition, the study has also provided anecdotal information on undocumented and illegal harvesting and trade within the study countries. The focus has been on the governance of the forest sector.

The study has produced 9 comprehensive country reports, each of 50-60 pages, covering Burundi, Kenya, Madagascar, Mozambique, Rwanda, South Africa, Tanzania, Uganda and Zambia. These are separate and stand-alone reports prepared based on a joint outline. Short summaries of each of these country reports are attached in the form of 9 Appendixes to this report.

In addition, as the study also included Botswana, Malawi and Zimbabwe although no field work took place in these countries, short overviews containing key data from a desk study have been included in the Appendixes.

The study has relied on available trade statistics, the compilation of which formed its starting point. This was followed by field travel and assessments in the respective countries. How these two parts were conducted is described in the following two sub-sections.

The work was carried out over a period of more than one years by a team of five consultants, with Håkan Sjöholm from HCL Consultants ltd. being the Team Leader. James Hewitt from SOPEX prepared all the trade statistics. Catherine MacKenzie from SOPEX was responsible for the country studies in Mozambique, South Africa and Zambia, Nicolas Blondel from SOPEX for Burundi, Rwanda and Madagascar, Jones Ruhombe from HCL Consultants ltd. for Kenya, Tanzania and Uganda.

## 2.1 Compilation of Trade Statistics

As a starting point for the study, summaries of the bilateral trade in wood-based products were compiled for each country. These cover the twelve years 2000-2011 and are based on export and import statistics presented in the United Nation's online Comtrade database (in the following referred to as “Comtrade”). There are a number of other sources of official statistics, notably the FAO, the USA’s International Trade Commission and the ITTO. Like Comtrade these rely on statistics supplied direct from individual countries.

The data obtained from Madagascar and Zambia was similar to that of Comtrade. Much of the data for Mozambique seemed improbable (given the trade statistics of its partner countries and those of similar countries) even when not clearly anomalous. Data for South Africa was only available for a substantial fee and it was unclear whether this would be identical to, or more reliable than, that of Comtrade. Comtrade

was also used to assess the trade of Botswana, Malawi and Zimbabwe, the 3 countries in which no field work took place.

Comtrade was adopted as the source of trade statistics presented in the country reports and in this summary report. Given that these statistics include estimates, particularly if the source data is anomalous and if the unit of measure is RWE, and considering that there may be inconsistencies in the records of partner countries, they should be regarded as indicative rather than precise.

The charts and tables presented in this report for the study countries' trade are available in spreadsheet files from http://www.globaltimber.org.uk/EandSAfrica. The source data from which they derive is freely available from the UN Comtrade database - which can be accessed after selecting search terms from the webpage http://comtrade.un.org/db/dqQuickQuery.aspx?px=HS&rg=1,2&so=8.

Tables which summarise the data are presented in the Annex of each country report. These tables include summaries for the products which are either imported or exported in greatest quantity (but only if that quantity is substantial, i.e. amounts less than 500 m3, 500 tons and USD 500 000 are presented as zero).

To present the data, estimates of weight or volume have been made where source data seems anomalous. Weight or volume has been converted to estimated roundwood equivalent volume by multiplying volume by (*in m3 per m3*) 1.4 for particleboard, by 1.8 for sawn wood and fibre board, by 1.9 for veneer and mouldings, by 2.3 for plywood (*in m3 per tonne*), by 1.6 for wood chips, by 2.8 for wooden furniture, by 4.5 for wood-based pulp, by 3.5 for paper, joinery and other finished products and by 6 for charcoal.

Two important charts are presented in the main body of the text of each country report. One of these indicates trends in, and the relative scale of, the country's imports and exports, over a ten year period. The other illustrates, in the form of a map, the direction and scale of that trade in the most recent year for which statistics are available from Comtrade.

The CITES trade database[1] indicates that during the last ten years, none of the study countries exported any relevant products deriving from tree species listed in CITES.

No official statistics of trade in certified wood-based products are available, as certification of wood-based product is a private sector initiative and therefore statistics of trade in certified wood-products are not collected and published by national governments. Still, large quantities of FSC certified timber is no doubt exported from South Africa, although without being recorded as such.

Any persistent large discrepancies between partners' reported trade statistics are mentioned in the text of the country reports – unless these are likely to be attributable to the estimates of weight or volume which have been made in this assessment.[2]

The need to improve the quality of trade statistics has been recognised for several years. The general practice is increasingly to use Comtrade as the source unless data can be received directly or if estimates based on corresponding data of partner countries can be made.

## 2.2 Field Work

The field work was conducted as a survey and fact-finding exercise, based on a detailed plan prepared and included in the inception report, in the 9 countries to obtain in-depth information at the country level

[1] http://www.unep-wcmc-apps.org/citestrade/

[2] Discrepancies attributable to differences in product classification should not occur (and would be consistent with illegality) http://www.wcoomd.org/learning_customshome_valelearningoncustomsvaluation_hsmultipurposestool.htm. Discrepancies attributable to changes in destination while in transit are less likely to reflect illegality.

through interviews with timber producers and individuals knowledgeable about wood working industries and the timber trade, and through visits to source areas. The consultant visited government ministries and departments and collected information at border crossings, harbours and railways stations.

## 2.3 Reporting

The study has collected a huge amount of data and information, fact and figures, which has been compiled, analysed and presented by the consultant in the following ways:

- County Reports, with detailed information from desk studies and field visits, for 9 countries, in the form of stand-alone reports.
- One Summary Report, this very report, which provides summaries and overviews as well main observations and recommendations.

Annex 1 provides, in graphics, the volumes (in RWE) and values (in USD) of the study countries trade in wood-based products, in the year 2011, exported from, and imported into, the study countries, except South Africa. By looking at Annex 1, the values of the timber flows can be established.

Annexes 2-5 provide, in figures, the volumes (in RWE) and values (in USD) of the study countries trade in wood-based products, in the year 2011, exported from, and imported into, the study countries, including South Africa.

Annex 6 provides an overview, country by country, of the key issues and main findings of this study.

Annexes 7 to 15 provide summaries of the 9 country reports.

Annexes 16 to 18 provide overviews of key data for Botswana, Malawi and Zimbabwe, countries in which no field work took place.

Annex 19 provides a list of References.

Annex 20 provides the complete ToR for the assignment.

## 3. Forest Resources

The forest resources of the studied countries are characterized by varied ecological conditions, including highland and tropical forests as well as dry land forests and even mangrove swamps. Natural or indigenous forests are usually found under government ownership, in the form of protected areas and forest reserves, managed for the purpose of production or conservation. Forest plantations are found under government or private management. In addition, smaller private woodlots at the farm level and trees outside of forests, under community or private management, are expanding. It can be seen that quality of management often varies with ownership; private forests are hardly ever mismanaged.

The extent of the forested area in the countries under study, consisting of 12 countries in Eastern and Southern Africa, has been estimated at 181 million ha in 2010 (FAO, 2010). This is to be compared with the forested area 20 years earlier, in 1990, which was 209 million ha, which represents a loss of 28 million ha, or 13%. This rate of deforestation over the 20 years means an annual loss over 1,4 million ha, or as much as 3900 ha every day.

**Table 1 Forested Areas, 1990 and 2010/ Tableau 1 Les zones boisées, 1990 et 2010**

| Country | Forest Area in 2010 | | Forest Area in 1990 | |
|---|---|---|---|---|
| | Area, 1000 ha | % of Land Area | Area, 1000 ha | % of forest cover change |
| Botswana | 11 351 | 20 | 13 718 | 8 |
| Burundi | 172 | 7 | 289 | 41 |
| Kenya | 3 467 | 6 | 3 708 | 6 |
| Madagascar | 12 533 | 22 | 13 692 | 8 |
| Malawi | 3 237 | 34 | 3896 | 2 |
| Mozambique | 39 022 | 50 | 43 378 | 10 |
| Rwanda | 435 | 18 | 318 | + 36 |
| South Africa | 9 241 | 8 | 9 241 | 0 |
| Tanzania | 33 428 | 38 | 41 495 | 19 |
| Uganda | 2 988 | 15 | 4 751 | 37 |
| Zambia | 49 468 | 67 | 52 800 | 6 |
| Zimbabwe | 15 624 | 40 | 22 164 | 29 |
| TOTAL | 180 966 | 29 | 209 450 | 13% |
| Difference | | | | - 28 484 000 ha |

**Source: FAO; Global Forest Resources Assessment 2010 (Compiled from tables 2 and 3).**

The above figures by FAO do not always correspond with official figures found in the individual countries. For Rwanda, for instance, the forested area is smaller than what is shown above.

With the on-going loss of forest covers, it should be noted that the best quality trees are the first to be cut, often illegally, in what is commonly known as a "creaming" process, often by pit sawyers. It is the valuable trees in the natural forest that traditionally have been targeted for export, but this resource has been disappearing fast. Extensive forest areas have been converted to agriculture or lost to shifting cultivation in Mozambique and Zambia as well as elsewhere. It is the same with charcoal making, taking place in all countries. The cultivation of tobacco and the drying of the product have cleared vast areas of miombo woodlands in central Tanzania.

Although the natural forest cover is diminishing throughout the study area except in South Africa, a substantial amount of forest plantations have been established, starting from the 1960s. The extensive loss of forest covers that have taken place in the slow growing indigenous forests is to some extent being compensated by the expansion of faster growing forest plantations and the growing of trees on farms. The extent of these plantations, mostly established as industrial forest plantations to provide raw material for an industry, is shown in Table 2. A study in Kenya in the early 1990s indicated that the standing volume of trees planted on farms was four times higher than the standing volume in the government owned forest plantations, then covering more than 200 000 ha.

**Table 2 Extent of Forest Plantations, 2010 / Tableau 2 Etendu des plantations forestières, 2010**

| Country | Areas of forest plantations, ha | | |
|---|---|---|---|
| | 2010 | 1990 | Difference |
| Botswana | 0 | 0 | 0 |
| Burundi | 69 000 | 0 | + 69 000 |
| Kenya | 197 000 | 238 000 | - 41 000 |
| Madagascar | 415 000 | 231 000 | + 184 000 |
| Malawi | 365 000 | 132 000 | + 233 000 |
| Mozambique | 62 000 | 38 000 | + 24 000 |
| Rwanda | 373 000 | 248 000 | + 125 000 |
| South Africa | 1 763 000 | 1 626 000 | +137 000 |
| Tanzania | 240 000 | 150 000 | + 90 000 |
| Uganda | 51 000 | 34 000 | +17 000 |
| Zambia | 62 000 | 60 000 | + 2 000 |
| Zimbabwe | 108 000 | 154 000 | - 46 000 |
| TOTAL | 3 705 000 | 2 911 000 | + 794 000 |

**Source: FAO; Global Forest Resources Assessment 2010 (Table 9).**

These tree plantations make up an important resource as a raw material base for the supply of wood based products intended for industrial purposes. Consisting of monocultures, these tree plantations contain few biodiversity values and provide little benefit for surrounding communities, except some job opportunities. In general, with the exception of South Africa having almost 50% of the above resource, the management of these plantations has not been up to required standards, with thinning and pruning not having been carried out, clear felled areas not being replanted, fires taking place etc.

# 4. Forest Management

In most countries, the predominant owner of forest land is the government, being responsible for forest management, which usually is centralised, or delegated to district authorities. In Tanzania, for instance, there are gazetted forest reserves under the central government as well as forest reserves, of local importance, under district authorities. Interestingly Tanzania has gazetted many forest reserves of water catchment values as 'catchment forest reserves' that are managed by a separate unit to conserve their catchment values. There are also cases of joint forest management, where a community is managing, on behalf of government, under special joint management agreements.

Forest management in all study countries, except South Africa, has all too often had a focus on timber extraction, where cash strapped authorities have turned to the forest to generate revenue and income, in the short term. The result has been overharvesting with little thought to regeneration and replanting.

While the above can be attributed to mismanagement, the forests of the study countries have also suffered from severe over exploitation, of the indigenous forests as well as the plantations. Much of the pit-sawing is made by pit-sawyers that have no licenses and not paying any revenue, and targeting the most valuable trees in highly organized operations, which is outright theft. Uncontrolled fuelwood collection and charcoal making to supply urban centres has been the cause for much of the deforestation.

In the study countries, it is still taken more or less for granted that indigenous forests have to be managed in the form of gazetted forest reserve, by government and in isolation from local communities. This management system has not been able to ensure sustainable management but it has at least prevented the gazetted areas from total deforestation, which is often the situation in the surrounding areas.

Although there is technical competence in the study countries to prepare forest management plans, such plans are often absent or not followed. Not only have operational funds and resources been inadequate to carry out prescribed silvicultural operations, there have also been cases of political interference that have dictated harvesting operations.

Forest inventories are expensive to carry out and get outdated very quickly, which is the reason why reliable data on the condition of the forest resource often is missing.

To be able to carry out proper forest management and implement forest management plans require not only resources and technical knowledge and commitment from the responsible staff but also an important component of protection from interference with these plans by outside forces.

## 5. Harvesting

Legislation in the study countries requires that harvesting shall begin with the issuing of a harvesting license, be it for a single tree, a specific compartment or a concession. These licenses should specify the physical location of the trees to be harvested, the tree species, the estimated volume, and usually also the revenue to be paid. Ideally any harvesting license should be based on an approved forest management plan or an estimate, based on an inventory, of the annual allowable cut. It is not unusual that these licenses are over-used in that a higher volume or a higher number of trees are felled, or the felling takes place outside of the specified location, or tree species that are not to be harvested are felled. There is even out right theft, in that the loggers have no license at all. Or licenses are forged, or prepared in such a way that they can be used more than once.

To move forest products, typically from the forest to a sawmill, requires a transport permit in all the study countries. These permits are usually issued by the forest administration, and control takes place at checkpoints, manned by staff that might not be able to distinguish between different tree species or are unable to estimate the volume loaded and transported on a lorry. Or do not know the documentation required, or do not understand the documentation, particularly not if the wood product is in transit from DRC with documentation in French. To avoid checkpoints, that are not manned 24 hours, transport at times takes place at night. Checkpoints established along major roads with the purpose of controlling the movement of timber are not effective and are easily overcome by the paying of bribes.

Logs, and in some places sawn timber, should be hammer marked. However, unmarked logs are often found in market places. There are examples of hammers having been forged.

There are many reasons why this very traditional system of issuing licenses and permits, which looks fine on paper and which follows basically the same principle throughout the study countries, does not work in practice. To implement the prescribed regulations, a strong presence and mobility of foresters in remote areas is required, to issue felling licenses, hammer mark logs, issue transportation permits and do the necessary follow-up. Law enforcement becomes difficult, if not impossible, as long as the adequate resources to support an efficient field organization are not provided.

There are many examples from the study countries demonstrating that the control of harvesting is poor, ineffective or absent, leaving the forest wide open to exploitation. Effective control of harvesting operations should be one management objective. In the community managed forests, the control of access to the forest resource has been quite effective, and at no cost to government due to forest patrols organized by these communities. A recent development in Kenya has seen the establishment of a paramilitary force in the forest administration, which indicates the gravity of the problem.

One implication of raw material having been acquired at no or low cost is that there is no incentive to utilize the wood effectively.

# 6. Forest Industries and Wood Processing

In all the study countries, the forest industry is in decline, except in South Africa. The industry had a much higher capacity many years ago, but has gradually deteriorated due to a shortage of raw material of the desired quality as a result of deforestation and mismanagement, preventing any further investment in equipment. In a historical context, the utilization of the valuable timber trees of the study countries started with the exportation of logs, which was eventually prohibited in many countries and replaced by local wood working industries, usually owned by foreigners. In parallel to that, pit sawing was for a long time a dominating way of producing sawn timber, and still is in some places. The equipment that was first introduced in Africa was designed to cut big size logs coming from the indigenous forests, while the plantations require much lighter and simpler equipment.

In Tanzania, with the help of donor funds, a major wood working industry complex was established in the 1970s, comprising of sawmills, board factories etc. under a governmental parastatal, the Tanzania Wood Industries Corporation, TWICO. The prerequisite was the establishment and development of a large estate of well managed industrial forest plantations, which never materialized to keep the industry going. A pulp and paper factory was also established, relying on a plantation estate of 42.000 ha at Sao Hill, but that unit never became profitable either. It was closed and was standing idle for many years, before it finally was privatized and restarted. Also in Kenya and Uganda, where at one time many saw mills were operating, there have been problems for these units to secure raw material.

In the study countries, however, South Africa has been able to create a well-developed and competitive wood industry, linked to a well-managed estate of tree plantations, the largest in Africa.

No doubt, a highly developed and competitive forest-based industry requires an efficient integration of the industrial production system with a reliable and sustainable raw material base. There is a strong demand for wood based products, globally as well as in the study countries, which should form the starting point for sustainable forest management, which is easier to achieve for uniform plantations than for the more complex indigenous forests.

# 7. The Domestic Market for Locally Produced Wood-Based Products

The local demand for wood-based products is high in all the study countries, and on the increase with increasing populations, urbanisation and higher incomes. Prices have therefore been going up on all local markets. A particularly high demand is coming from a booming construction industry, resulting in a high demand for building poles, usually of eucalyptus. On the other hand, the demand for quality hardwoods locally in the study countries is often decreasing, as a result of high prices and a limited choice of species because of over harvesting. The demand is more for low quality and cheap timber, also for furniture making. A tendency can be observed in some place that local furniture is made of metal instead of wood, an indication that wood is expensive.

Although most of the study countries are rather well forested, and/or having a good potential for forestry, many wood based products are being imported to meet the demand, for sawn wood, furniture, paper etc. This is largely due to the absence of an industrial infrastructure able to produce the product mix that is in demand.

Paper is manufactured at a small scale, relaying on old equipment, in many of the study countries, based on the importation of pulp in combination with the utilization of waste paper. Among the study countries, pulp is only manufactured in South Africa and Tanzania. A major pulp and paper factory in Kenya was closed a few years ago. There is extensive importation of paper into all countries of the region, which represents high values.

Plywood and board factories are only in operation in Zambia and Uganda, producing low quality products in contrast to the high quality production taking place in South Africa of particleboard, fibreboard, MDF and plywood.

The mining industry, in Zambia and in South Africa, use substantial volumes of mining timber, sometimes called pit props, to support and strengthen the mines. The main species is eucalyptus. With rural electrification expanding, there is also a high demand for poles, of treated eucalyptus.

## 7.1 Fuelwood

Fuelwood, or firewood and charcoal combined, is for the ordinary citizen of the study countries the most important forest product, accounting for a very high share of the demand and consumption of wood. As much of the collection and consumption takes place in the informal sector of the economy, it is not easy to get reliable volume figures. The harvesting for fuelwood, particularly for large scale and commercial charcoal production, has left many forested areas bare. Table 3 has been included to give the perspective, showing that the amount of wood used for energy is far greater than what is used for industrial round wood.

**Table 3 Consumption of Woodfuel and Industrial Roundwood (1000m3), 2008/ Tableau 3 Consommation de bois de chauffage et de bois rond industriel (1000m3), 2008**

| Country | Fuelwood | Industrial roundwood |
|---|---|---|
| Botswana | 674 | 105 |
| Burundi | 8965 | 333 |
| Kenya | 21141 | 1246 |
| Madagascar | 11910 | 277 |
| Malawi | 5293 | 520 |
| Mozambique | 16724 | 1304 |
| Rwanda | 9591 | 495 |
| South Africa | 19560 | 19867 |
| Tanzania | 22352 | 2314 |
| Uganda | 38468 | 3489 |
| Zambia | 8840 | 2325 |
| Zimbabwe | 8545 | 771 |

**Source: FAO: State of the World's Forest 2011 (Extracted from table 4).**

It should be realized that much of the fuelwood is not coming from closed forests as such, but being collected from other land use types in the form of twigs, branches, dried wood etc. It is therefore important to know where the fuelwood is coming from as most of it cannot directly compete with industrial roundwood or be used for the manufacturing of wood-based products.

Over the years, a number of fuelwood studies have been conducted in the study countries, at different levels. From these studies can be concluded that a very rough planning figure for the consumption of fuelwood at national level is at between 0,8 to 1,0 m3 per individual and year. Most attempts to bring down the consumption of fuelwood by the introduction of stoves have not been successful.

The large-scale commercial fuelwood plantations that were established in a few of the study countries in the 1980s never became successful, as poor people are unable to pay for the product.

# 8. Institutional Frameworks

In the study countries, the administration of forest resources is quite traditional and goes back to colonial days, when a forest department typically was established to look after the interest of the government, as the land owner. These forest departments have survived to the present days, having a field organization that follows the administrative boundaries of the respective country. At national level a director of forestry is typically appointed, along with regional and district forest officers, in an organization that usually is understaffed and under-resourced to carry out the necessary duties. The forest department would most often fall under a ministry of agriculture, natural resources or environment.

Forest policies and forest laws/acts, that are updated from time to time, regulate the functions of these institutions and the responsibilities vested in them. Management regulations, always quite detailed, provide instructions and guidelines for how forest management is to be conducted. There has always been a focus on revenue generation, and on protection of the resource. Although these legal documents are well formulated and written with the best of intentions, it has been difficult to meet expectations and take full advantage of the many possibilities that a healthy forestry sector can offer in a development context. The forest policies of some countries are badly outdated when it comes to the involvement of local communities in forest management.

Forest management was from the beginning assumed to be conducted in gazetted forest reserves, away from people, and protected by forest guards. The better forests, including critical watershed areas, were set aside as gazetted forest reserves, marked on the ground with beacons. Anybody entering would be trespassing and committing a crime. Those forest reserves remain until today, often as degraded forested patches in areas otherwise denuded of trees.

In recent years changes have been seen in that sectors reforms have taken place in a few countries, notably in East Africa where there now are forest services that are more autonomous from government, being responsible for the overall management. Policy and legal issues remain with the old forest departments, having been considerably down sized. It is still too early to determine the impact on forest management of these administrative changes.

Over the years, in all countries except in South Africa, there have been numerous instances of corruption and the sacking and transfer of individuals who have been accused of misconduct. With new institutional arrangements, much change can maybe not be expected as the staff joining the new set-ups is coming from the previous administrations. Salaries and remuneration are now better than in the past.

The donor community has over the years provided extensive technical support to strengthen the forest sector and its forest administrations, in all of the study countries but at various intensities. It all started in 1960s in a very hands-on way with support to forest plantations, forest inventory and establishment of forest industries etc., to continue with integrated rural development programmes where forestry was only one component. Today all of this is gone, and the support, if any, goes into policy formulation and strategic issues. Over the years this support to forestry has included the posting of international technical advisors as well as extensive capacity building activities, with a focus more on technical issues than on institutional building ones. Notably the Nordic countries have maintained a long presence in Eastern Africa and supported education and training, at both vocational and University levels. Many teaching institutions have benefitted as well as many individuals. Still, the targeted forest administrations have not managed to grow strong and fulfil their mandates by exercising sustainable forest management.

# 9. Legal Frameworks

In any country, it is its constitution that lays down a framework that defines fundamental political principles, establishes the structure, powers and duties of government institutions as well as setting out fundamental rights and duties of citizens. Long term development plans, sometimes formulated in visionary documents, then provide overlapping policy directions and often sets targets, for different sectors of the economy. Apart from specific forest policies and forest laws, there are a number of other policy documents and laws that provide direction for the forestry sector, on issues of overall land use, environment, wildlife, tourism, climate, pollution, gender, workers' safety etc. All these documents are country specific, formulated with the best of intentions, but leaving the key issues of implementation and coordination between sectors in the dark.

Governments are responsible for the formulation of policies and legislation that regulate procedures and management standards for the forest sector, and determine responsibilities among various actors and stakeholders in the sector. The governments of the study countries , except in South Africa, "own" most of the forest resources and must therefore also provide the resources required for management, maintenance and investment. Here, there is most often an unbalance between what has been planned and what can be implemented.

## 9.1 Export Requirements

The export of forest products is regulated in detail in the study countries and requires that a number of more or less standardized steps are followed, to secure an export license or export permit:

- The exporter needs to be registered
- The exporter makes an export application, specifying the goods with the forest administration
- The products to be exported are inspected, by the forest administration and/or customs officials to ensure that the goods confirm with the application
- Sometimes, a health declaration of the wood is required
- The Customs issue the required export license/permit.

In some of the study countries, wood products are seen as 'restricted products', which requires an export permit to enable export. Although logs are usually not allowed to be exported, logs can still be exported from some countries if there is a special license from the respective forest department.

There is no export duty on wood based (and other) products going to China from Zambia according to 'the China's Special Preferential Tariff Treatment Agreement for Least Developed Countries in Africa, SPTT'.

On the other hand, none of the countries are having import restrictions on wood based products, or require information about origin of the imported forest products.

## 10. Overview of the Timber Trade

It is the demand, at local, regional and international levels that decide the movement of the various timber sector products. Europe is only an important market for South Africa, see annex 12. In recent years the tree plantations of the study countries have become a most important source to satisfy demand. The time when indigenous hardwood species were much sought after and preferred on domestic markets in the study countries is now over, as a combination of high prices and short supply is making way for cheaper alternatives of lesser quality.

Note that in order to distinguish trees in forests which are propagated naturally from trees grown in plantations, the text in the following defines the former as forest and the latter as tree plantations.

Looking at the countries in this study, there is quite a difference in the extent of forest cover, varying from 67% for Zambia to 6% for Kenya according to table 1. The extent of forest plantations is also very varied between countries. As a result some countries are being dependent on others for the supply of timber products, which drives a regional trade, which is both legal as well as illegal.

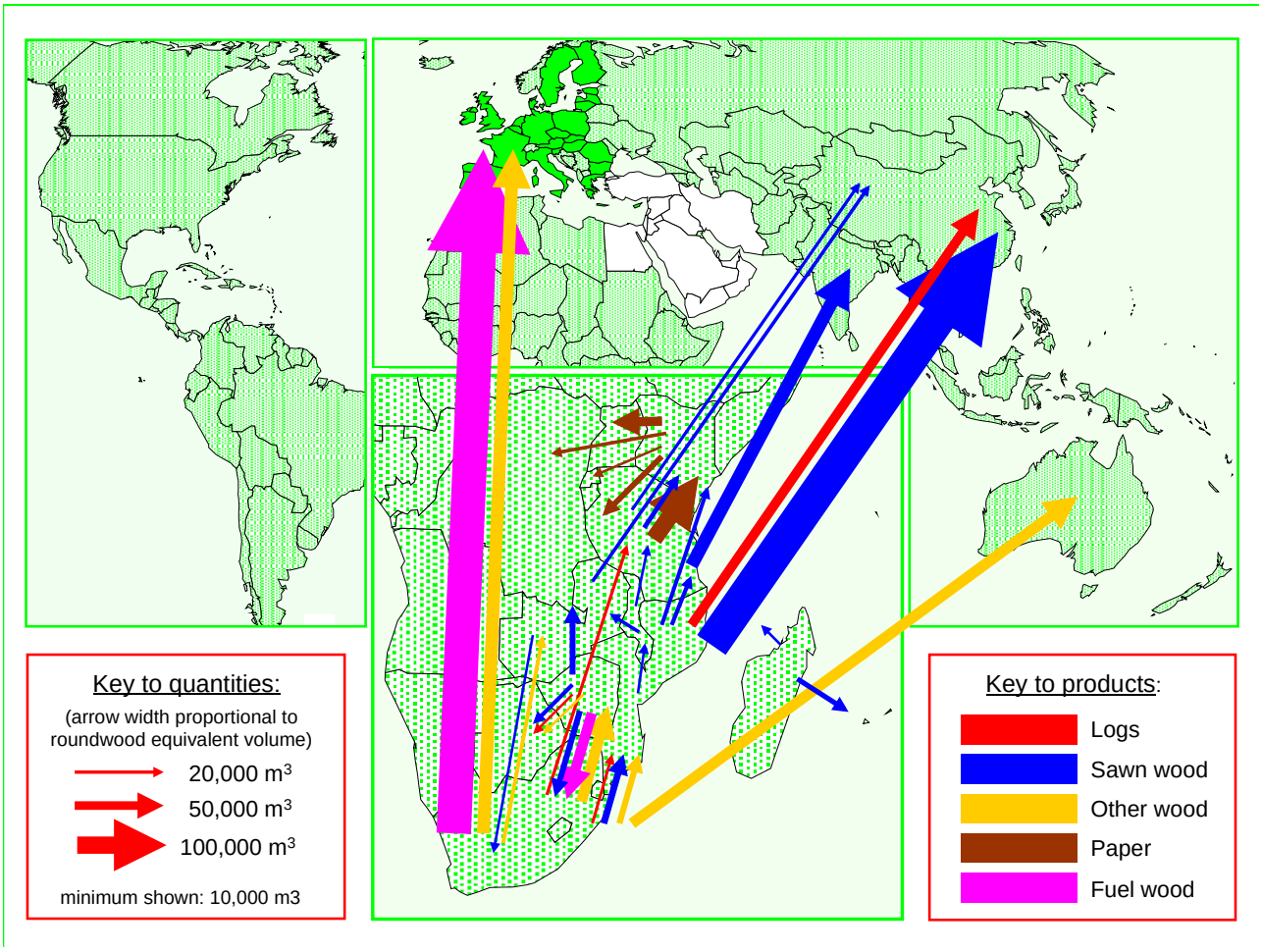


**Figure 1 Study Countries' Exports of wood-based products (2011)/ Figure 1 Exportations de produits à base de bois des pays étudiés (2011)**

**Sources: UN Comtrade and study countries, 2013**

Figure 1 above illustrates the direction and relative scale of the flow of wood-based products from the study countries during 2011, with one major exception.[3] Harbours and ports along the Eastern Coast of Africa are the main outlets for these exports, as well as for import. Traded products cross country borders between the study countries at border-post established at highways and roads, as well as between such border-posts to avoid customs procedures. Smuggling of goods also takes place across certain rivers and lakes forming national boundaries. The chart does not include the exports of wood chips, pulp and paper from South Africa. In total, the RWE volume of those exports is an order of magnitude greater than South Africa's exports of timber sector products. Those paper sector exports are supplied primarily to East Asia) [4]

## 10.1 The study countries' exports to the EU-27

Of the study's 12 countries, only South Africa exports substantial quantities of wood-based products to the EU.

Almost all the wood-based products that South Africa exports to the EU, including charcoal,[5] derive from plantations in South Africa and most of these are FSC-certified.

If governance concerning the timber and paper sectors in the other countries studied were to improve as a consequence of a VPA, the EU might be able to increase its share of the market in those countries. Unscrupulous local and foreign competitors would lose market share. However, those markets are small.

The EU is unlikely to import substantial quantities of wood-based products indirectly from the study countries. Although China accounts for most of the timber from forest (as distinct from tree plantations) which the study countries export to destinations outside Africa,[6] a large majority of this will enter end-use within China.

Consequently, neither direct nor indirect trade with the EU are likely to provide the EC with a strong negotiating position concerning prospective VPAs with any of the 12 countries.

## 10.2 The study countries' exports to countries outside Africa (excluding the EU-27)

Mozambique exports a much larger quantity of tropical timber than any of the other study countries. It does so predominantly to China. Other countries in East Asia import small quantities of tropical timber from the study countries, as does the United Arab Emirates.[7] It is unclear how much of the quantity supplied to the United Arab Emirates is subsequently forwarded elsewhere. China is significant also as a destination for the tropical sawn wood exports of Tanzania and Zambia.

India imports substantial volumes of sawn wood from Tanzania and, after transit through Uganda and presumably Kenya, South Sudan. It is unclear how much, if any of this derives from indigenous forests. All, or the great majority, of this is likely to comprise plantation-grown teak.

South Africa supplies the great majority of the wood-based products which the study countries export. Most of this is exported to the paper sector in East Asia and derives from FSC-certified plantations. South Africa also exports wood chips to Japan, presumably for pulp production.

[3] Flows smaller than a roundwood equivalent volume of approximately 10,000 cubic metres are not shown on the chart.
[4] Information about these flows are presented in the country report for South Africa
[5] http://www.charcoal.co.za/
[6] Most of that timber is supplied directly from Mozambique.
[7] These rarely exceed a roundwood equivalent volume of a few thousand cubic metres *per annum*

## 10.3 The study countries' exports to countries elsewhere in Africa

The study countries tend to export only small quantities of wood-based products to countries elsewhere in Africa, mainly to neighbouring countries. Most of this derives from plantations.

Although Zambia exports substantial volumes of logs and sawn wood to DR Congo, it is unclear how much of this comprises products deriving from Zimbabwe and/or South Africa. Islands in the Indian Ocean, particularly La Réunion and Mayonette, account for most of the substantial volumes of plantation-grown wood which Madagascar exports.

Tanzania started to export plantation wood to Kenya in 1999 when the plantations in Kenya were closed to harvesting. Burundi, Rwanda and Uganda are all having small areas under plantations and export very little if any plantation wood.

Paper supplied from South Africa accounts for most of the roundwood equivalent volume of paper sector products which is exported from the study countries to destinations elsewhere in Africa. Kenya is the only other study country which exports significant quantities of paper to those countries, and does so primarily to DR Congo and, to a lesser extent, Ethiopia.

South Africa exports a much greater quantity of wood-based products than the other study countries. Malawi has a large plantation estate and is exporting timber to neighbouring countries. DR Congo puts wood products on the market but the flow of timber from DR Congo seems to vary depending on the security situation in that country.

## 10.4 The study countries' exports to other study countries

Most of the wood-based products that are traded between the study countries derive from plantations. Most of this comprises logs (including poles), sawn wood and paper. The volume or weight of the timber sector products traded between study countries tends to be small. However, substantial volumes of sawn wood are supplied from South Africa to Mozambique, from both Tanzania and Malawi to Kenya, and from Zimbabwe to Botswana and South Africa.[8] Substantial undeclared volumes of sawn wood are supplied from Mozambique to Malawi and Tanzania, including for onward export. It seems that increasing volumes of sawn timber from the North of Mozambique are transiting to other destinations through Tanzania.

Most trade in paper sector products between the study countries is supplied from South Africa. Although, substantial quantities of paper are exported from Tanzania to Kenya and from Kenya to both Tanzania and Uganda, it is unclear how much of this either has been manufactured by mills whose pulpwood derives from trees grown in those two supplying countries or comprises of re-exports from elsewhere.

The only fuelwood (charcoal) that is traded between the study countries in any quantity is supplied from Botswana and Zimbabwe to South Africa.

## 10.5 Overview of the Study Countries' trade in Timber Sector Products

A number of observations can be made from Figures 2 and 3 below. Above all that Mozambique is a major exporter of timber, almost all of which goes to China. Trade between the study countries is also quite substantial. Tanzania has emerged as a major exporter only in recent years, largely due to better management of its tree plantations after the private sector has been invited as a forest manager.

[8] "Small" is defined here as less than a few thousand cubic metres or tonnes. "Substantial" is defined here as more than about ten thousand cubic metres or tonnes.

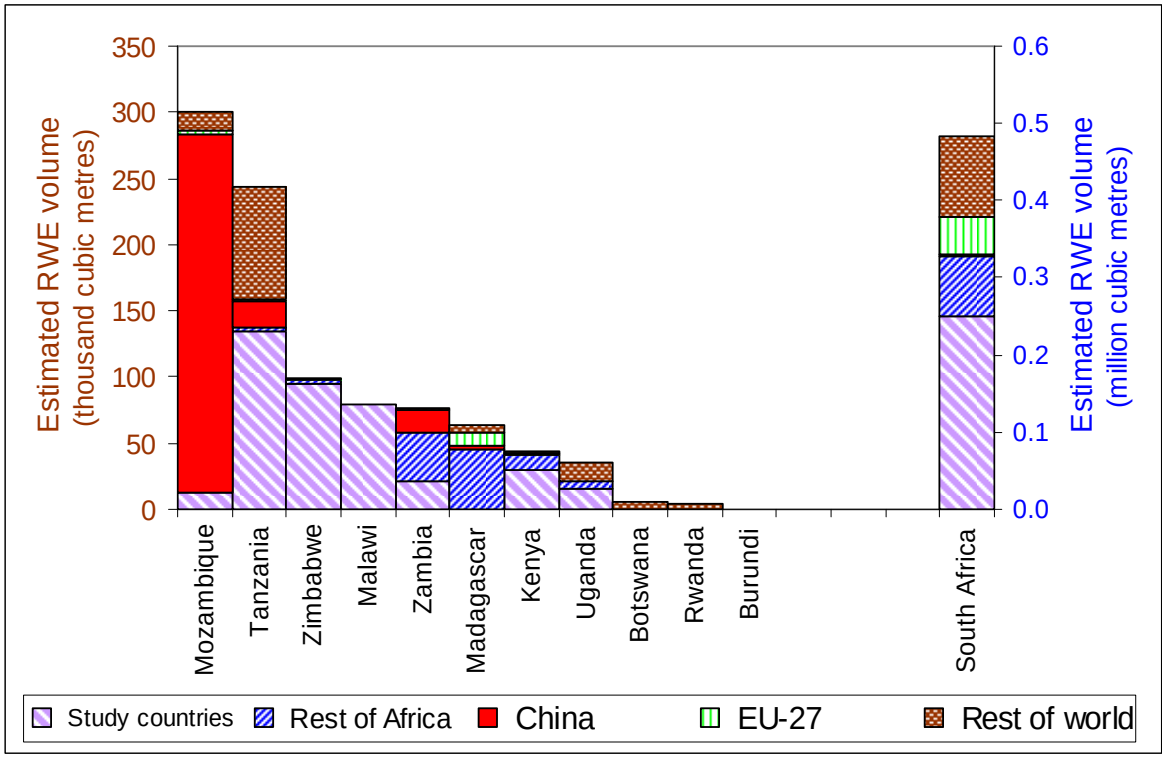


**Figure 2 Timber Sector Exports from each Study Country - by Destination/ Figure 2 Exportations du secteur bois de chaque pays de l'étude – par destination**

**Sources: UN Comtrade and study countries, 2012**

Tanzania has had an established market for plantation grown teak to India, and like Kenya, some export of mangrove poles to the Middle East. Malawi, with a plantation estate as large as that of Tanzania, has been a traditional exporter of timber for many years. Figure 12 in Annex 1 shows the total export value of this trade from the study countries, which is around 160 million USD.

Even South Africa, with a large domestic demand, is able to export, also to Japan.

Figure 3 below indicates that most of the timber sector products which are exported from the study countries comprise of sawn wood. There is export of wooden furniture from the study countries in spite of a large demand domestically. Logs, particularly in the form of poles, are important for construction purposes as well as for electrification. Panels and plywood do represent large volumes, and values. Of the study countries, South Africa is exceptional in the quantity and variety of timber its exports.

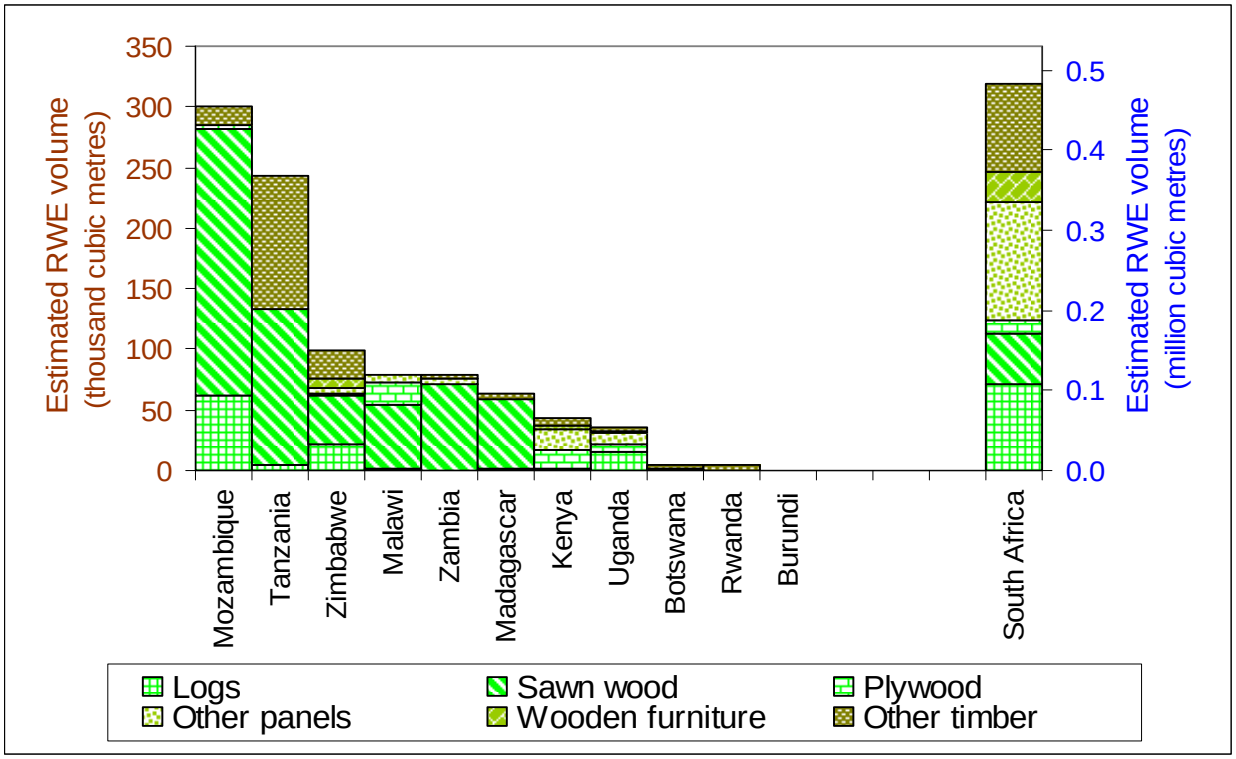


**Figure 3 Timber Sector Exports from each Study Country – by Product/ Figure 3 Exportations du secteur bois des pays de l'étude – par produit**

**Sources: UN Comtrade and study countries, 2012**

With the demand for timber sector products being high in the study countries, importation is high, to bridge the gap between local demand and supply, see figure 4, with the import value shown in figure 15 in Annex 1. A country like Botswana, lacking its own forest resources, is a big importer. So are also Zimbabwe and Zambia, having gone from surplus situations to one of shortage. Most of the imported products are originating from the other study countries. Much of what Tanzania imports comes from Malawi and Mozambique. China is a major supplier, particularly of plywood, other panels and furniture to the study countries including products that are used by projects carried out by Chinese investors in the study countries. South Africa is again standing by itself, importing products from Malaysia and South America and also from Europe.

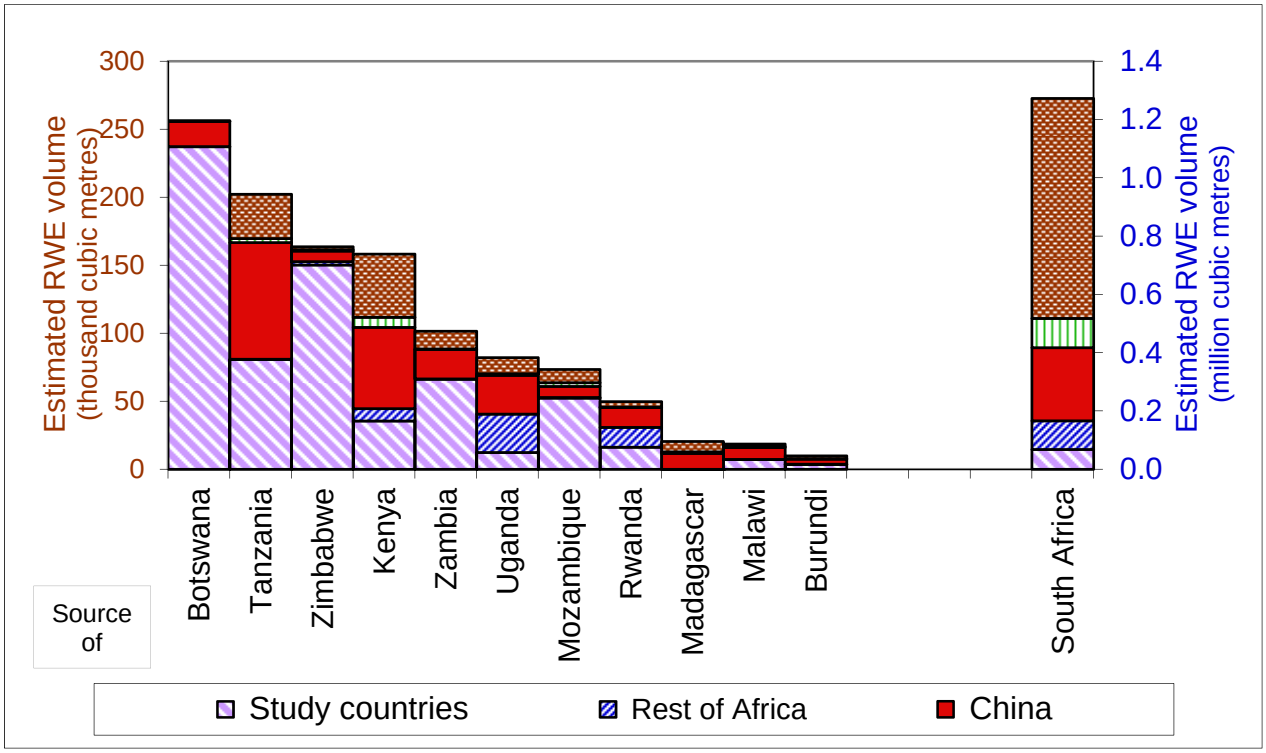


**Figure 4 Timber Sector Imports into each Study Country - by Supplying Country/ Figure 4 Importations du secteur bois vers les pays de l'étude – par pays fournisseur**

**Sources: UN Comtrade and study countries, 2012**

The trade in wood based products in the study countries involves quite a mixture of products, as can be seen from Figure 5, from simple sawn wood and poles to wood furniture. The value of this trade is shown in Figure 15 in Annex 1. Plywood, for instance, is only manufactured in a few of the study countries outside of South Africa and is in demand everywhere. South Africa is an exporter as well as an importer.

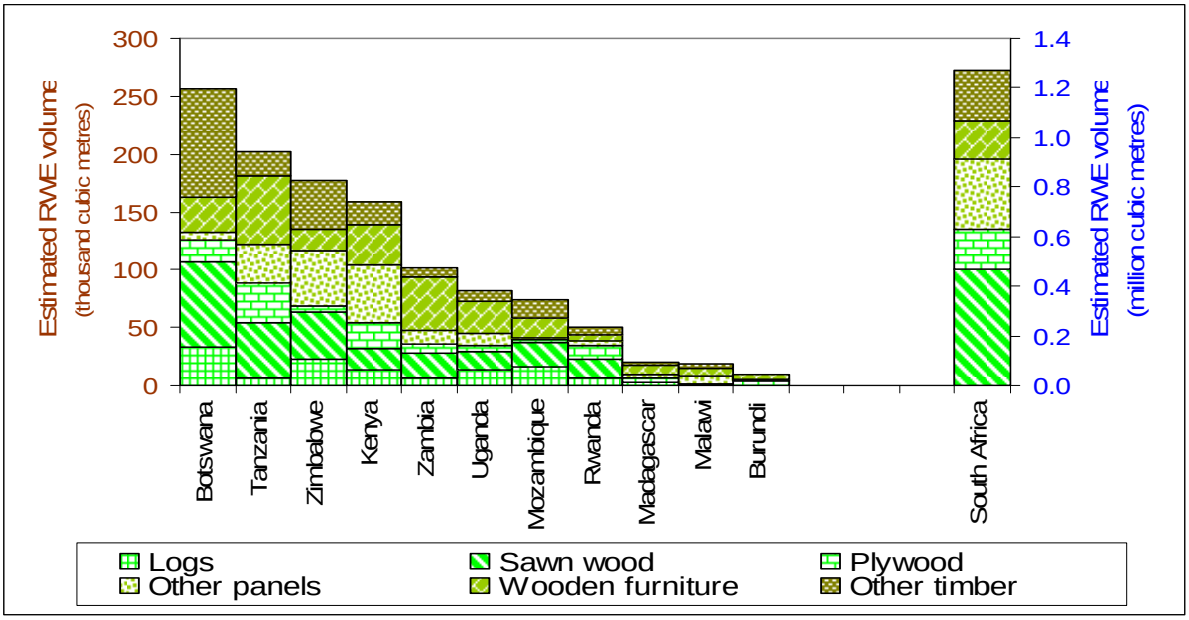


**Figure 5 Timber Sector Imports into each Study Country - by Product/ Figure 5 Importations du secteur bois vers les pays de l'étude - par produit**

**Sources: UN Comtrade and study countries, 2012**

## 10.6 The Study Countries' exports of logs from forests and tree plantations (2000-2010)

Although the exportation of logs is banned in most of the study countries, it still goes on. Mozambique is a major exporter, see Figure 6, of logs from indigenous forests as well as from plantations.[9] Much of this export is illegal. From Mozambique in particular there has been a shift from the export of logs to the export of sawn wood. The export from South Africa of plantation grown timber is extensive, and legal.

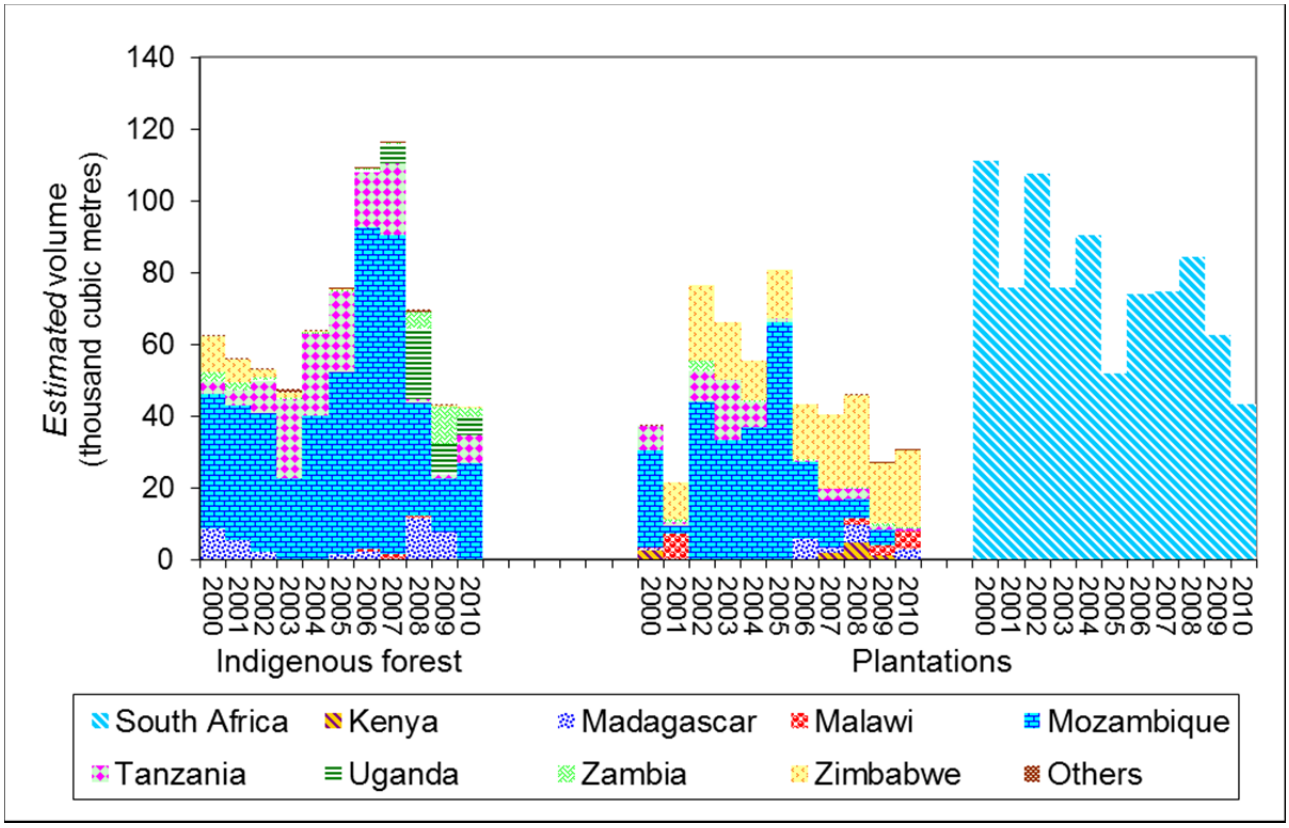


**Figure 6 Export of Logs from the Study Countries – from Indigenous Forests and plantations/ Figure 6 Exportations de rondins des pays de l'étude - de forêts indigenes et plantations**

**Sources: UN Comtrade and study countries, 2012**

## 10.7 The study countries' exports of sawn wood from forests and tree plantations (2000-2010)

Comparing figures 6 and 7 reveals that the volume of logs exported in 2010 was five times smaller than that of sawn wood.

[9] The segmentation between forest and plantations shown in figure 6, and also in figure 7, reflects a combination of general knowledge of the origins of industrial roundwood production in each study country, the commodity codes under which UN Comtrade reports bilateral trade, and the preferences of partner countries

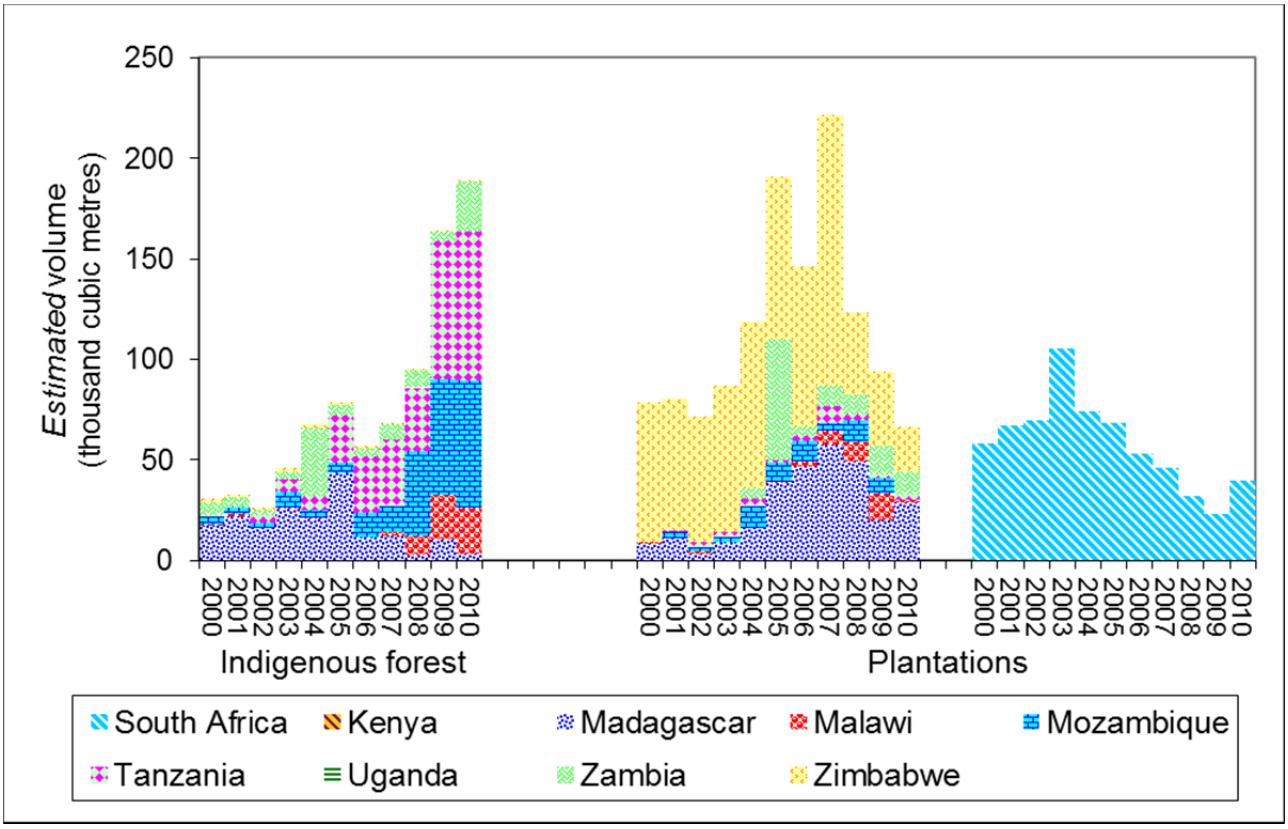


**Figure 7 Export of Sawn Wood from the Study Countries – from Indigenous Forests and plantations / Figure 7 Exportations de bois de sciage des pays de l'étude – de forêts indigenes et plantations**

**Sources: UN Comtrade and study countries, 2012**

Zimbabwe has remained a major exporter of plantation grown wood, although the volumes exported have been going down in recent years. Figure 7 indicates that South Africa exports the same volume of sawn wood as Madagascar, Malawi, Uganda and Zimbabwe, and less than Mozambique and Tanzania who are the main exporters of sawn wood from indigenous forests.

## 10.8 Overview of the Study Countries' trade in Paper Sector Products

Paper products are exported from a number of the study countries. With the exception of exports from South Africa, other study countries are the destinations for most of those exports, see Figure 8. Although the manufacturing of pulp only takes place in Tanzania and Zimbabwe, and of course in South Africa, some smaller paper mills do exist in some study countries, relying on imported pulp and/or the use of recycled paper.

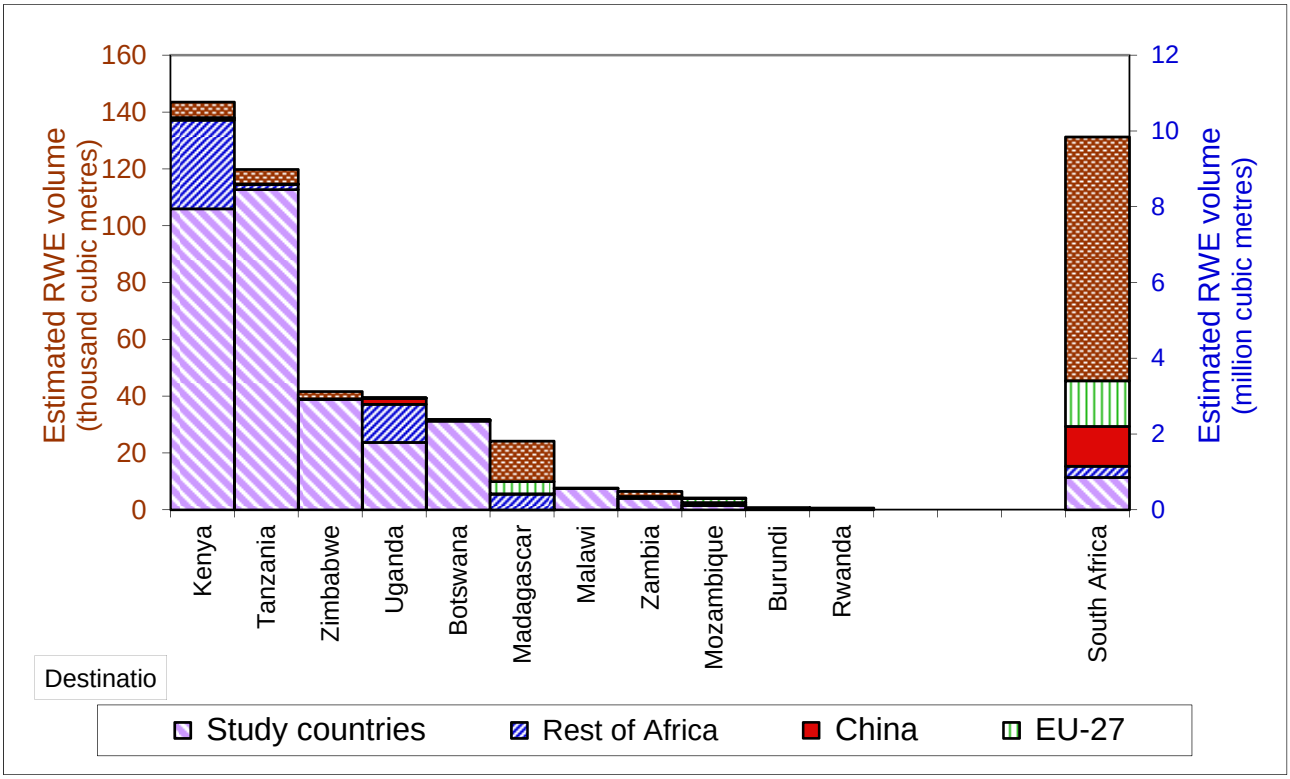


**Figure 8 Paper Sector Exports from each Study Country – by Destination/ Figure 8 Exportations secteur papier des pays de l'étude – par destination**

**Sources: UN Comtrade and study countries, 2012**

From Figure 9 can be seen that the export of paper sector products consists almost exclusively of paper, with Kenya and Tanzania being major exporters. However, South Africa exports much more paper than the other countries combined, and it exports even larger quantities of and wood chips. The value of this export is shown in Figure 17 in Annex 1.

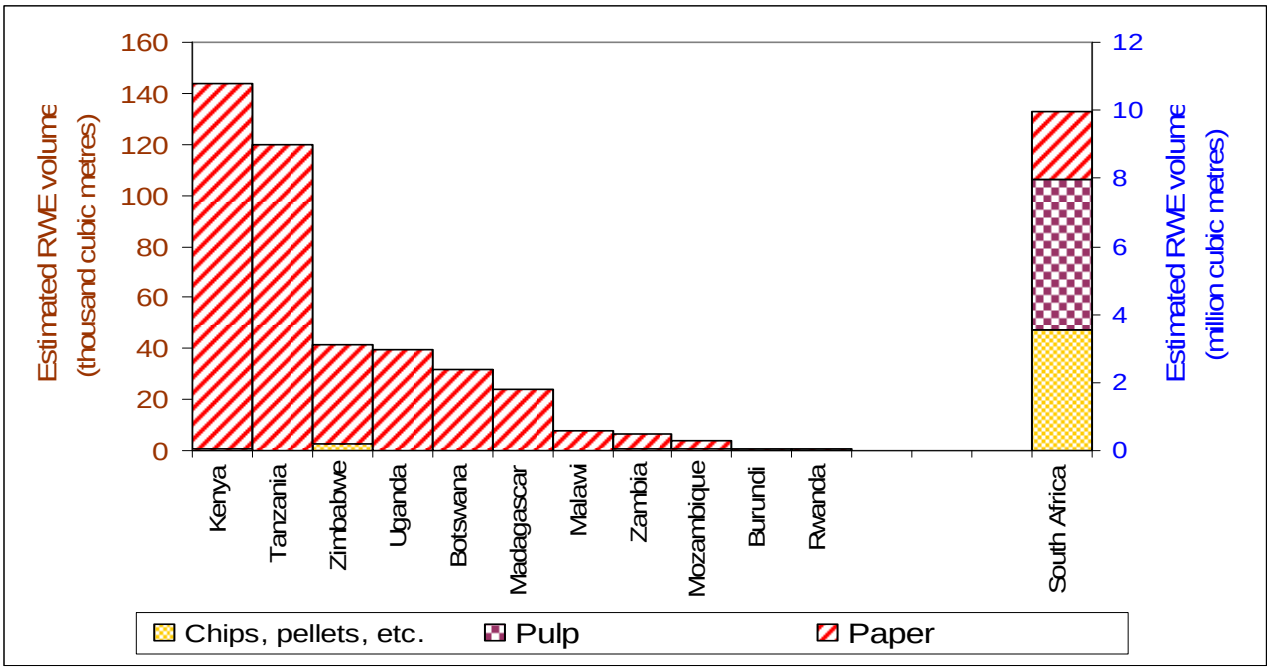


**Figure 9 Paper Sector Exports from each Study Country – by Product/ Figure 9 Exportations secteur papier des pays de l'étude – par produit**

**Sources: UN Comtrade and study countries, 2012**

All the study countries are importing paper. South Africa supplies much of the paper that the study countries are importing from other study countries, see Figure 10. Egypt supplies almost all of the paper which Kenya and Uganda import from the Rest of Africa. Some of the paper which is imported into Kenya is likely to be in transit to neighbouring countries.

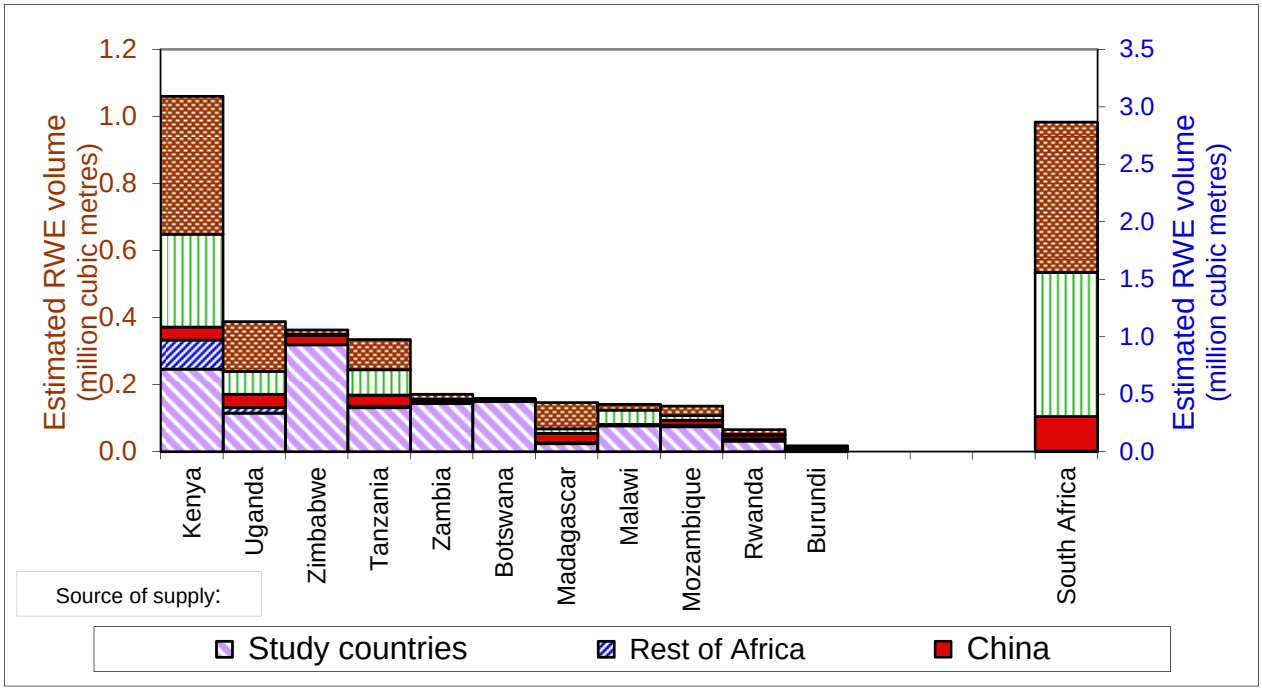


**Figure 10 Paper Sector Imports into each Study Country – by Source of Supply/ Figure 10 Importations secteur papier vers les pays de l'étude – par pays fournisseur**

**Sources: UN Comtrade and study countries, 2012**

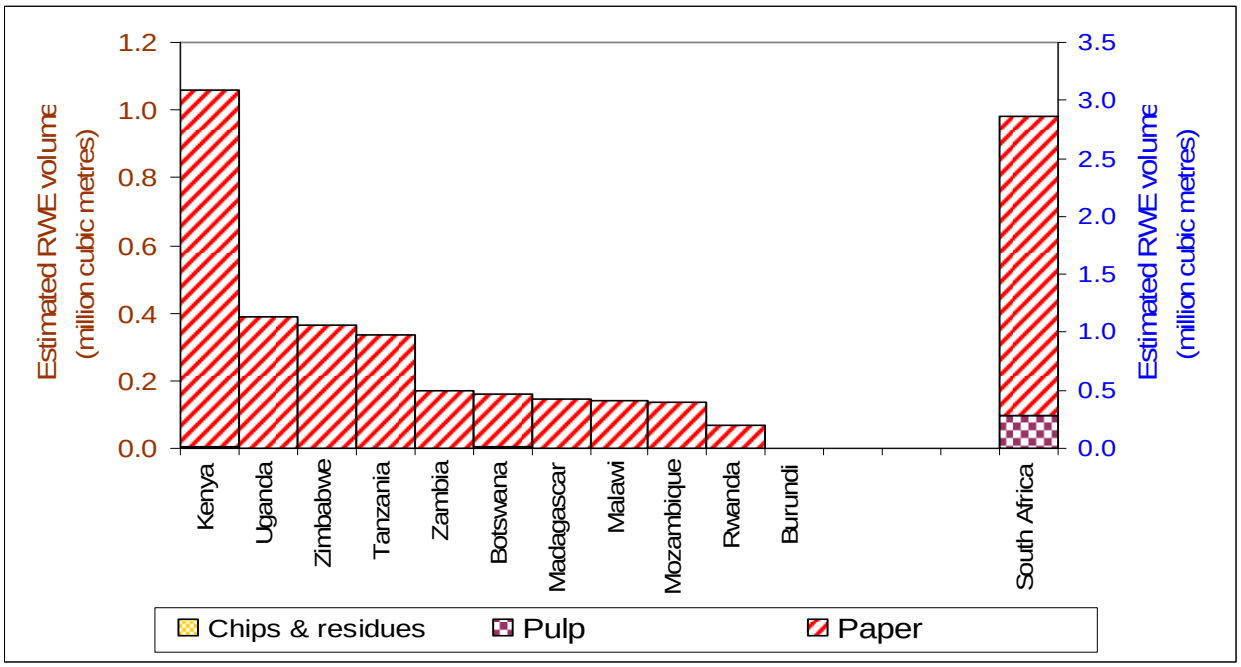


**Figure 11 Paper Sector Imports into each Study Country- by Product/ Figure 11 Importations secteur papier vers les pays d'étude – par produit**

**Sources: UN Comtrade and study countries, 2012**

Although the paper consumption per head is small, in comparison with for instance Europe, the value of this trade is quite substantial and amounted to some 1 billion USD in 2011, see Figure 18 in Annex 1. The dominating product for this trade is paper, see figure 11. The charts in the section above are all based on the figures presented in Annexes 2 to 5.

# 11. Main Species Traded

There is a clear trend in that forest products coming from plantations are becoming more and more important in supplying the market, while the slow growing indigenous and more traditional timber trees are becoming rare, and therefore more costly. This trend is being reinforced as the cultivation of trees outside of forests, in agroforestry systems and around settlements etc., also is on the increase.

The main commercial tree species grown and traded in the study countries include the following:

In plantations:

Pine species (Pinus patula, caribea, kesiya, oocarpa), mainly for sawn timber

Cupress (Cupressus lusitanica), mainly for sawn timber, often marketed as pine

Grevillea robusta, mainly for timber of low quality, often grown outside of forests

Eucalyptus species (Eucalyptus grandis, camaudulensis, globulus, saligna etc.) for pulp and paper, poles and fuelwood.

In general, plantation development has benefitted from research findings. Selection of proper seed sources, tree improvement, improved management techniques etc. have boosted productivity and enabled the creation of sustainable and profitable plantation estates in many localities among the study countries.

In the indigenous forests:

A great number of different species are found throughout the study countries, where there are large areas of miombo woodlands, in addition to many precious trees species in the indigenous forest particularly sought after, including many mahogany species, rose wood (Dalbergia spp) and the African blackwood (Dalbergia melanoxylon) etc. The use of hardwood species, for furniture making but also for fulfilling specifications in building norms, is quite traditional. Extensive deforestation and creaming of the most sought after tree species have created a shortage, so it is no more a matter of choice but rather availability that decides what the market can supply. In general, management of the natural forest is quite complicated, with a great mixture of species with different demands on light, moisture, nutrients etc. making it difficult to maintain sustainable production levels.

# 12. Stakeholders

There is a slowly increasing awareness of all stakeholders in the study countries of the importance of maintaining and managing forest resources in a sustainable way, including the many benefits that can be generated. At the same time, there is a general awareness of the problems and shortcomings that have characterised the sector in recent years. Forestry issues are now very much in focus with the on-going discussion on the implications of climate change. The younger generation, particularly university students, is more concerned over environmental issues and the necessity of not overusing natural resources which means that there are opportunities for change.

The forest administrations of the study countries have for a long time had a focus on revenue collection and not on sustainable forest management. These administrations have been understaffed and under resourced, unable to maintain a strong field presence. Although there have been policy dialogues and efforts at strengthening the concerned institutions, little change has been seen at the operational level where no firm control of harvesting operations have been in force. A most interesting as well as surprising development can be seen in Kenya, where a paramilitary force has been established recently to patrol the government forests, in parallel to an equally ambitious programme on community participation. This strong focus on forest protection using armed staff is a clear parallel to what for a long time has been the norm in the wildlife sector.

Many donors have had a long presence in the forestry and environmental sectors in the study countries, the most visible ones being all the Nordic countries, Netherlands, Germany, France, Switzerland and Belgium. At one time there was also support to forest industry. In recent years Japan has appeared on the scene. There has been a tendency for certain donors to favour certain countries and some sub-sectors.

Locally, Universities and Research Institutions can be most influential along with various associations, representing timber growers, timber exporters, sawmillers etc. In Kenya, both UNEP and ICRAF are promoting and following the FLEGT activities quite closely, together with the African Forest Forum, AFF. Forestry research is being conducted at national research institutions as well as at some of the Universities.

International NGOs, like WWF, IUCN and TRAFFIC, together with many local ones, are not only acting as watch dogs, but also providing direct support to forest management and conservation, often working closely with local communities. The donors do not only provide bilateral support but also work to strengthen the NGO sector, which is maintaining a role as campaigner and lobbyist having an impact on public opinion and tending to have an increasing influence on government policy and practice.

Reforms of the sector are necessary and well underway in some countries, driven by pressures from the international community, NGOs, forest adjacent communities as well as civil society.

# 13. Timber Tracing

None of the study countries, with the exception of South Africa, have any systems or procedures in place to enable tracing the origin of timber. In Uganda and Madagascar, however, such systems have been identified and tested, but never been put to use.

In South Africa where almost all plantations as well as indigenous forest are certified, a tracking system is in place and all harvested logs are given a digital code.

There are modern, electronic tracking systems available, although a bit complicated and expensive that provide the opportunity of determining the origin of timber and therefore its legality. Considering that the cross-border trade between the study countries is quite extensive, the introduction, somehow, of a regional system seems essential to bring in control of this trade.

## 14. Certification

There are a few individual forests in the study countries outside of South Africa that are certified. However, in Madagascar, Mozambique, Tanzania and Uganda some smaller areas have indeed been certified, all under the FSC system. Forest certification comes at a cost, and the interest among consumers in developing countries in paying a higher price for a product that can ensure that forest management is following a prescribed system might be limited. The producers are also demonstrating the same limited interest as long as there is no opportunity of cost recovery, which no doubt is the situation on the domestic market in the study countries.

In South Africa, again, the picture is the opposite with almost all tree plantations having been certified.

# 15. FLEGT

The European markets are only of little interest for the export of wood products from the study countries, except South Africa. The European Union, through the FLEGT initiative, is therefore not in a strong position to push for change and enter into negotiations over VPAs in individual countries. Still, the EU can influence the debate and make high government officials aware of what goes on in the sector and argue for the benefit of reform. Mozambique, Madagascar and Zambia would then be high on the list.

The spirit of the FLEGT initiative is well understood and accepted not only in Europe but also in countries like the USA and Australia. In China, Taiwan, India etc. there is not the same appreciation for environmental issues and the importance of preventing large scale deforestation. A much wider responsibility is required by the countries now importing huge quantities of timber from countries characterized of weak governance, with a total disregard of the environmental implications as well as of legality.

Although the international community is well aware of what is taking place, there is no international mechanism in place to stop the on-going destruction of the African forests. It is all up to the responsible governments in the countries being targeted to address what is going on, which in turn requires a political will to do so. The advantages are obvious; increased revenue, environmental benefits and an improved reputation.

# 16. CITES and other Multilateral Environmental or Trade Agreements

The study countries are signatories to a number of both regional agreements and Multilateral Environmental Agreements (MEAs). At the international level, the ratified MEAs include the conventions on biodiversity (CBD), desertification (UNCCD), climate change (UNFCCC), migratory species (CMS) and trade in endangered species (CITES). Regional agreements include SADC Protocols on forests, wildlife, water, energy, agriculture and others that fall under trade through the Common Market for Eastern and Southern Africa (COMESA). Many of the study countries are active in the subsequent dialogues under the Inter-governmental Panel on Forests, Inter-governmental Forum on Forests, the United Nations Forum on Forests and similar initiatives related to forestry.

Aspects of these conventions and agreements have been internalised in country level policies and laws. However, implementation varies. For instance according to CITES, each party is responsible for implementation of the convention in its own country and for co-operating with other parties to enforce the rules. Species that are threatened and listed under CITES in the study countries include Prunus Africana (African cherry) and Dalbergia melanoxylon (African black wood).

Following the general outcry in Madagascar after logging crises in the late 2000s, the country could not avoid adding all rosewood species and ebony species to Annex III of CITES. There are at least four species of rosewood, about 40 species of palissandre (rosewood and palissandre belonging to the same genus Dalbergia) and about 90 species of ebony (genus Diospyros).

# 17. Anecdotal Evidence of Illegal Activities

There are many examples in the individual country reports of not only illegalities, but also of poor forest management practices. Further examples can be found in studies conducted by donors, international organizations and NGOs. The following common examples can be cited:

- Forest management regulations are not followed; replanting of clear felled areas is not taking place, thinning and pruning are not done
- Illegal logging is wide spread; pit sawing, creaming of valuable tree species, overuse of forest concessions, cutting of protected trees
- Abuse of harvesting licenses; higher volumes are cut, harvesting takes place outside of given areas
- Ineffective revenue collection; under recording of volumes and wood quality
- Transportation of forest products without permits, or with faked permits
- Destruction and loss of forested areas; for agriculture, charcoal making, tobacco growing and drying
- Irregularities at border crossings and in the handling of customs declarations.

Illegal, corrupted and non-prescribed activities are taking place all the way from the forest, through harvesting, transportation, processing and to the final marketing of the products, including export procedures. Existing practices vary between the study countries, but the situation is far from satisfactory everywhere, except in South Africa.

It is necessary to look at the various steps in the product chain in an integrated way, as they are closely linked to each other. Harvesting is critical, because if this is not done properly and legally, the other following operations cannot be expected to be executed properly. It all starts upstream, in the forest, with poor management planning and the allocation of logging permits, being followed by poor governance in all successive steps. In parallel, forest management must follow some basic rules of sustainable management of a resource that foresters are so proud to call renewable.

Illegalities and the non-paying of fees and revenues, or reduced payments, mean that governments are losing enormous amounts of revenue, which are very much needed for financing required operations and investments in the sector.

When the processing industry is paying little or nothing for the raw material, they tend to be careless and do not utilize the wood efficiently, even leaving pieces of wood in the forest. When the forest industry sector is getting raw material at reduced cost, it means that the forest sector is subsidizing the forest industry. A vibrant forest sector needs a linkage to an efficient industry, and the other way around. A better integration of the two sectors is needed to ensure sustainability. In many cases there is a need for higher forest product prices, based on actual costs to ensure cost recovery.

# 18. Observations

The key problem affecting the forest sector is weak governance and poor law enforcement, which enables illegal harvesting, trade and export of wood based products to flourish.

Although there are excellent policies and workable regulations, these are not followed or are being abused. There is not an absence of detailed regulations, but a lack of commitment and resources to enable implementation of these frameworks, i.e. there is in practise not a well-adjusted balance between what is required and what can be implemented and enforced. Many of these regulations are not adjusted to the reality on the ground where a limited staff force is unable to carry out the prescribed control functions.

In countries like Mozambique and Zambia, where forest management virtually has collapsed, it is sad to see what is allowed to take place. This in turn goes back to the direct involvement of government officials and politicians in illegal logging and illegal timber exportation. There is an absence of political will to interfere and introduce change.

Management instructions and regulations have remained largely unchanged over the years. Licenses and permits required for harvesting and transportation of forest products require a lot of paper work, signatures and stamps. The sector has not adapted to modern electronic system for tracking and movement of timber. The forestry sector has operated in a traditional way, and resisted change.

This happens in a situation where the study countries all have excellent growing conditions to promote, develop and maintain a healthy forest sector. The demand for forest products is strong and increasing. As paper consumption is going up, most of the study countries are forced to import large quantities of paper sector products, at escalating costs.

This means that the potential of the forest resource in the study countries is far from utilized, particularly when considering that forests are renewable, if properly managed. One implication is that large amounts of revenue are not being collected, which prevents much needed reinvestment in the sector. Deforestation therefore continues, so does the creaming of the most valuable tree species.

While governments simply have failed as forest managers, the private sector as well as individuals and communities are demonstrating their interest and ability to protect forest resources and conduct proper forest management, which clearly indicates that the technical knowledge to conduct proper forest management is available.

There is not a lack of adequate policies, laws and regulations for ‘how to do it’, but the political will and the resources required to implement and to enforce what has been prescribed.

# 19. Recommendations

What is required to arrive at a healthy forestry sector has been identified in existing policy and legal documents, supported by detailed technical instructions, in all study countries, without exception. None of this is particularly complicated to follow and achieve, considering that foresters have been trained to fulfil and work according to what these regulations require. Similarly, institutions have been established and are in place with the responsibility of exercising proper forest management. To enable the sector to operate efficiently, extensive investments have been made over many years in hardware and software, to build capacity and sustainability. The result, however, has been most disappointing. Resources generated in the forest have not been reinvested in the sector, largely because of corruption and limited revenue collection.

The study has identified the following priority areas as recommendations for the study countries:

**Technical Issues - Forest Management:**

- Existing management knowledge should be fully used, and be applied particularly for management planning of individual forests. Forest protection is to be seen as part of forest management.
- Management objectives of individual forests should be reviewed, and possibilities of privatization looked into, particularly for plantations.
- The concepts of sustainable forest management and good governance should be widely communicated.
- Local communities should be widely invited to participate in the management and protection of forest resources, and then also be allowed to benefit.

**Technical Issues – Licensing and Harvesting:**

- Timber quotas, licensing (simple and concessions), harvesting, processing and export by species and location should be comprehensively and transparently reported.
- Support work to establish annual allowable cuts for each timber species in every forest district and ensure that annual licensing does not exceed it.
- Institute independent forest monitoring in key areas/forests by NGOs or some international agencies.
- Logging should be totally stopped in many indigenous forests.
- Awarding licenses and harvesting permits should be through competitive bidding so that the various products can fetch a price the market is willing to pay.

**Technical Issues – Trade and Markets:**

- Commission studies on domestic timber markets with the objective of making it sustainable.
- Commission national or sub-national forest timber inventories.
- Forest administrations should make it one of its key responsibilities to collect information on forest products trade. A central computerised depository of the information should ideally be established and be made available to all users.
- Pricing studies are needed as prices and taxes of forest-based products not are adjusted to market realities and actual costs.
- Develop timber recognition handbooks.

**Technical Issues - Customs:**

- Customs services are critical and needs strengthening, to include cooperation across borders.
- Customs should be required to report on timber export by species, volume, processing status, by port, using consistent formats for volumes and values.

- Support the development of HS codes for regional timber and timber-based products, and prepare illustrated manuals and perform training to accompany them.
- Establish preferential tariffs (or no tariffs) on fully-processed and semi-manufactured timber products from countries that have been struggling with illegal export to China

**Technical issues – Timber Tracking**

- The systems available for the tracing and tracking of timber should be put to use, to be operated from outside of the sector.

**Technical issues – Forest Certification**

- Certification of forests under a suitable process such as Forestry Stewardship Council (FSC) is to be promoted for both private and public forests, which is expected to have a positive **i**mpact on the quality of management of those forests

**Technical issues – Information and Awareness**

- Improve the systems of management of information (database, information flows) within forest administrations.
- When new forest laws are enacted, observe and analyse its application (how it works, possible weak points or difficulties) and propose correction measures or accompanying measures if needed.
- Form and or mobilise networks of NGOs, academia, and civil society to obtain data on actual indigenous forest and woodland timber exploitation, destinations and end uses and possible illegal activities. Identify hot-spots and establish "forest watch" to alert authorities and communities if illegal actions are discovered, particularly if related to export.
- Increase the awareness of the importance of forest resources not only among the general public but also among concerned civil servants.

**Technical issues – Firewood**

- Deforestation and forest degradation are partly triggered and driven by an overwhelming dependency on wood-fuel. While it may not be practically feasible to significantly reduce the dependency, rigorous promotion of wood-fuel saving technologies and establishment of sources outside indigenous forests could be sustainable coping mechanisms.
- Reduce the proportion of the wood resources which is consumed to produce charcoal by improving the ratio of the conversion to charcoal by the replacement of the current traditional kilns by more efficient systems (improved small-scale kilns and possible introduction of semi-industrial kilns), which in theory "automatically" leads to large scale saving of wood. Currently, improved kilns are still marginally used and the objective would be to introduce them more widely.

**Institutional issues:**

- Forest administrations require strengthening, particularly on all aspects of good governance and forest protection.
- Prompt an increase of the level of funding to forest administration by the State so that more effective administrations can emerge.
- Practical forest management and the running of field operations should be separated from policy making and the formulation of laws.
- Revenue collection in the sector is to be vastly improved, by entrusting the handling of fees and payments to authorities outside of the sector.
- Prohibit the import of illegal timber, starting with state-owned forestry enterprises and their subsidiaries, including forest product importers to prevent illegal trade and import of illegal timber.

- Strengthen institutional capacity in law enforcement, monitoring and administration in order to curb illegal forest harvesting.
- Develop academic courses in forest governance and prevention of illegal logging.

**To the EU and other donors:**

It is not clear that a FLEGT VPA would be a universally and effective tool to curb illegal logging and trade in timber-based products. The amount of timber that goes to Europe every year from the study countries is small, and from some countries it is zero, which does not warrant efforts to establish VPAs. However, large quantities are exported to China, particularly from Mozambique, where it is consumed on their domestic market, rather than being processed for subsequent export to European markets. So, unless the markets change dramatically, FLEGT will not be relevant for addressing illegal timber harvesting and trade in these countries.

Although a FLEGT programme might help put illegal logging on national agendas, the negotiations required to achieve a VPA would require extensive investments from the EU, at the same time as there is no real political will to address the problem of illegal logging and similarly little prospects in the short term of a major change in the concerned governments. Funds channelled through governments might be vulnerable to abuse, which could damage FLEGT's credibility.

However, in about half of the countries studied (Mozambique, Tanzania, Zambia, Madagascar, Uganda), illegal logging, particularly to supply the markets of China but also domestic markets, is a serious problem, and this justifies EU support to provide a preliminary analysis of the situation. In addition, and in particular:

- The EU could also assist the Chinese government, timber and manufacturing associations to make the transition to legal procurement, manufacturing and export, to ensure access to European markets of Chinese wood-based products.
- Commission a review of the nature and outcomes of the support to date for the various FLEGT initiatives in the region (SADC, ACP FLEGT, and COMESA), including who participates and any connections they may have with illegal logging. Support should be provided to studies that address problems identified in these scoping studies.
- Support a study of the role of Mozambique, South Africa, Kenya and Tanzania as consumers or conduits of illegal timber from other countries in the region, especially the land locked countries, Zambia, Zimbabwe, Malawi, and Botswana.

**To the governments:**

The above recommendations are in no way new, simply repetitions of what other studies have identified in the past. Also recent workshops and seminar have ended with similar sets of recommendations, with some being more detailed than others. What is needed is quite obvious, but still very little improvement has been seen. It is a matter of how implementation is exercised at the field level, where committed staff needs to maintain a presence, by putting existing knowledge to use, rather than rewriting policies and undertaking length research activities.

Some important control functions that by tradition have been entrusted to the forestry sector should possibly be exercised by bodies outside of the sector. This concerns not only revenue collection and timber tracking, but also forest management where local communities have demonstrated a will and capacity to protect and manage, most successfully and at no cost to government.

Considering what goes on, governments need to ensure that culprits are taken to court, as corruption, illegal logging and illegal export of timber-based products are criminal offences. Not even much of that is being seen.

To go forward in the sector, it is now necessary to identify and address all the weak spots and take a comprehensive grip that can take in the totality, not address only isolated issues of mismanagement. Radical changes are required, including the introduction of sector reforms.

If all harvesting are prohibited in forests that are being over exploited and cleared, it would be simple to monitor, if the will is there, as all forest products coming out of it would be illegal. Such moratoriums on harvesting should in many cases form the starting point for starting afresh, in a fully organized manner.

**To the Government of China:**

- Pressure should be put on the Chinese Government to institute a comprehensive prohibition on the import of illegal timber, and to enforce it strictly, starting with the state-owned enterprises.
- Introduce preferential tariffs (or no tariffs) on fully processed timber from countries struggling with illegal export to China.
- Reform state owned forestry enterprises and forest product importers to prohibit illegal trade and import of illegal timber.
- Provide financial support for the development of local processing industries in countries exporting unprocessed products so that processing of logs into sawnwood or other value added products can take place.

**Expansion of study:**

The present study has only examined the forest governance and trade situations in nine of the countries in Eastern and Southern Africa, excluding Malawi, Zimbabwe, Botswana, Namibia and Angola. Southern Sudan has also been omitted. These countries warrant study. Although none is likely to have sufficient trade in wood-based products with the EU to justify a VPA, anecdotal information from the present study suggests that illegal logging is a problem in Southern Sudan, Zimbabwe and Angola. Illegal traders are known to be based in Namibia. Botswana has substantial volumes of heavy hardwood species currently being logged illegally. Little is known about forest governance and trade in any of these other countries, so profiling the current situation would be a very useful first step in understanding and tackling the issues as it would provide important baseline information and a level of problem identification analysis that might avert or stem illegal logging in the future, and alert and mobilise civil society.

# ANNEXES

## Annex 1 Overview of the Study Countries' Trade in Wood-Based Products 2011

This annex has been prepared to show in graphical form the volumes of Round Wood Equivalent m3 (RWE) and values (in USD) of the timber and paper sector products, in the year 2011, exported from, and imported into, the study countries, except South Africa (because the quantities for South Africa are so much larger than those for the other countries).

Each of the figures in this annex has been divided into two parts; on the left hand side are the physical quantities and on the right hand side the trade values. The study countries have been arranged in alphabetical order.

The left hand side of the below figures are identical to the ones appearing in the main text as figures 2-5 for the timber sector and figures 8-11 for the paper sector, then arranged based on magnitude. South Africa has been included in the main text section, at a different scale.

Summaries of the data on which these figures are based are found in Annex 2-5.

The figures below are self-explanatory and enable a comparison of volumes with values.

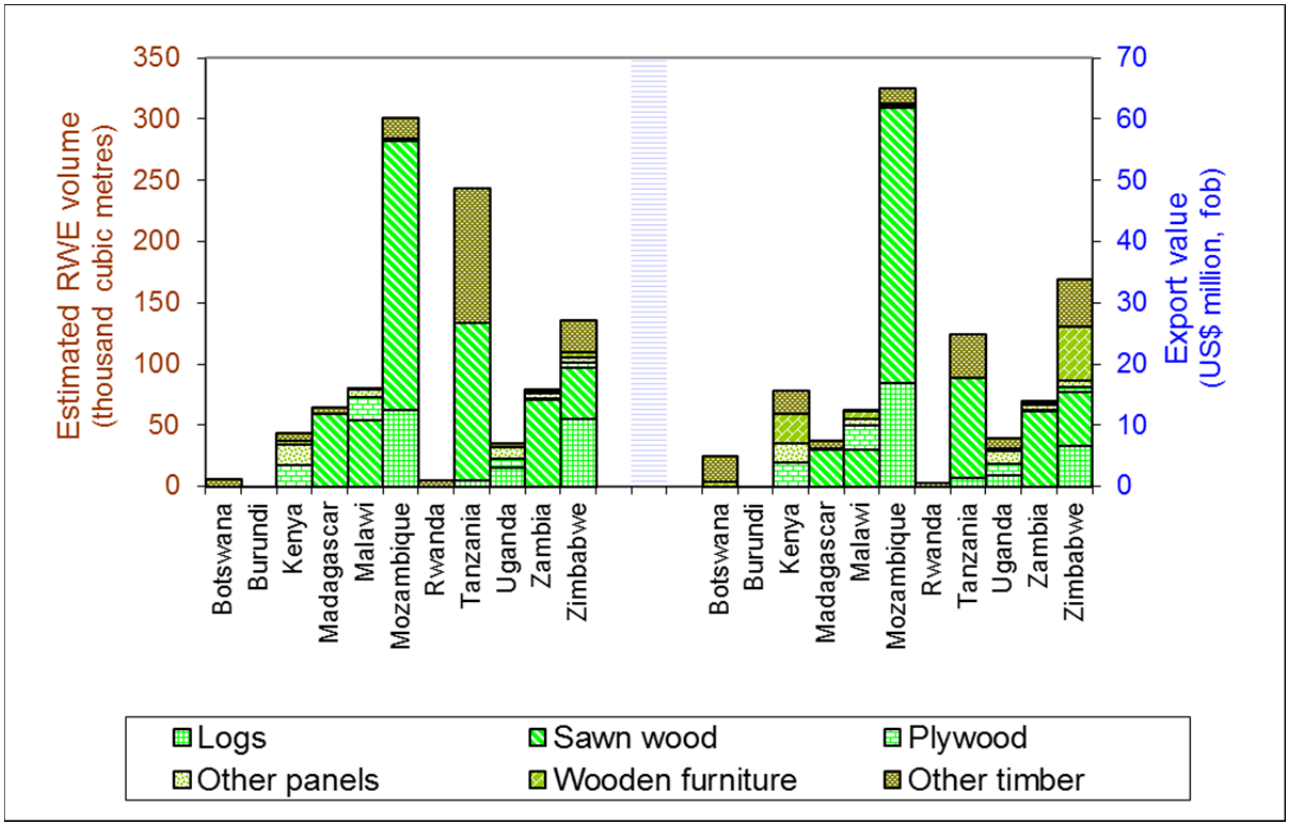


**Figure 12 Timber Sector Exports – RWE volumes and USD values - from study countries by product/ Figure 12 Exportations secteur du bois – volumes équivalents bois rond et valeurs USD – des pays de l'étude par produit**

**Sources: UN Comtrade and study countries, 2012**

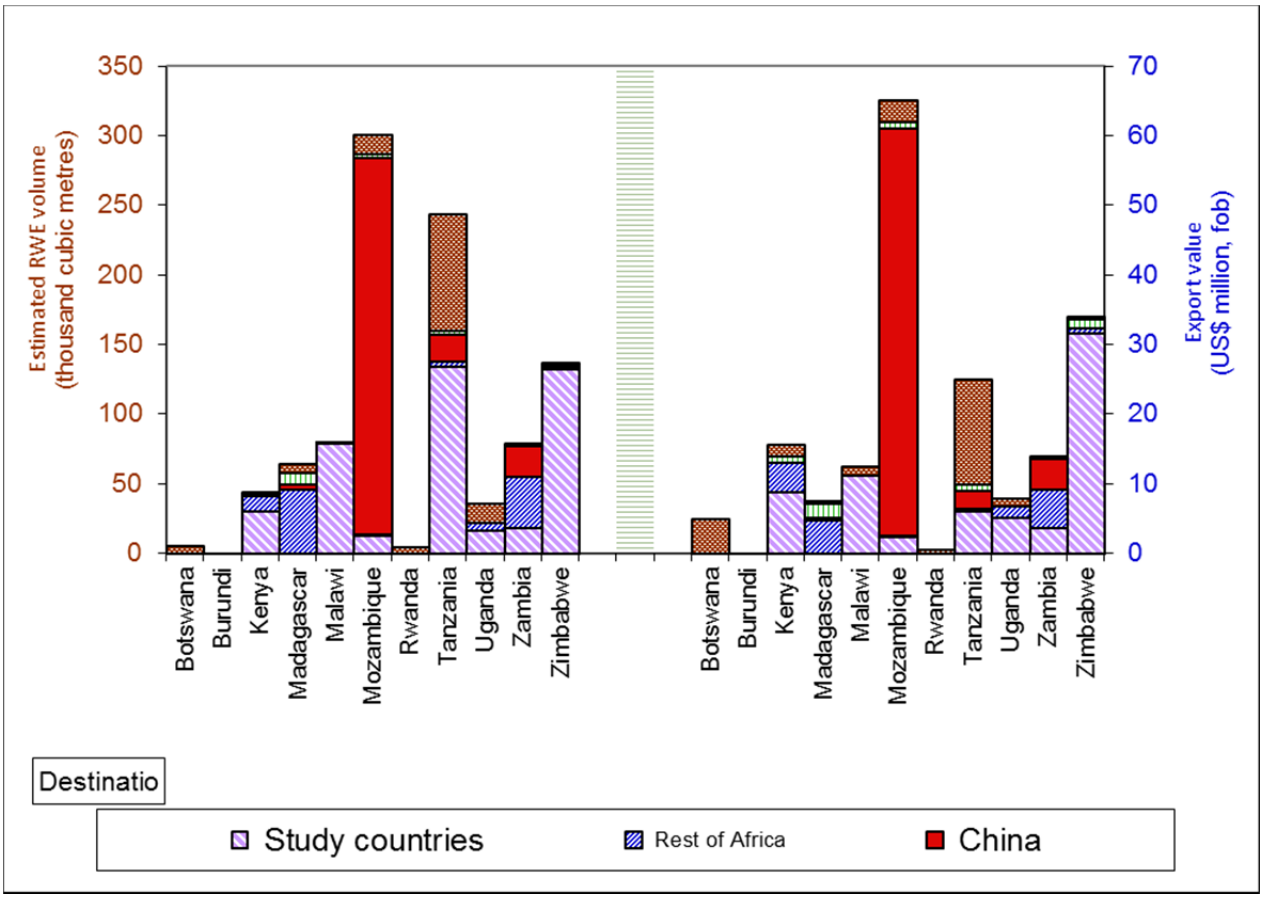


**Figure 13 Timber sector exports – RWE volumes and USD values - from study countries by destination/ Figure 13 Exportations secteur du bois - volumes équivalents bois rond et valeurs USD – des pays de l'étude par destination**

**Sources: UN Comtrade and study countries, 2012**

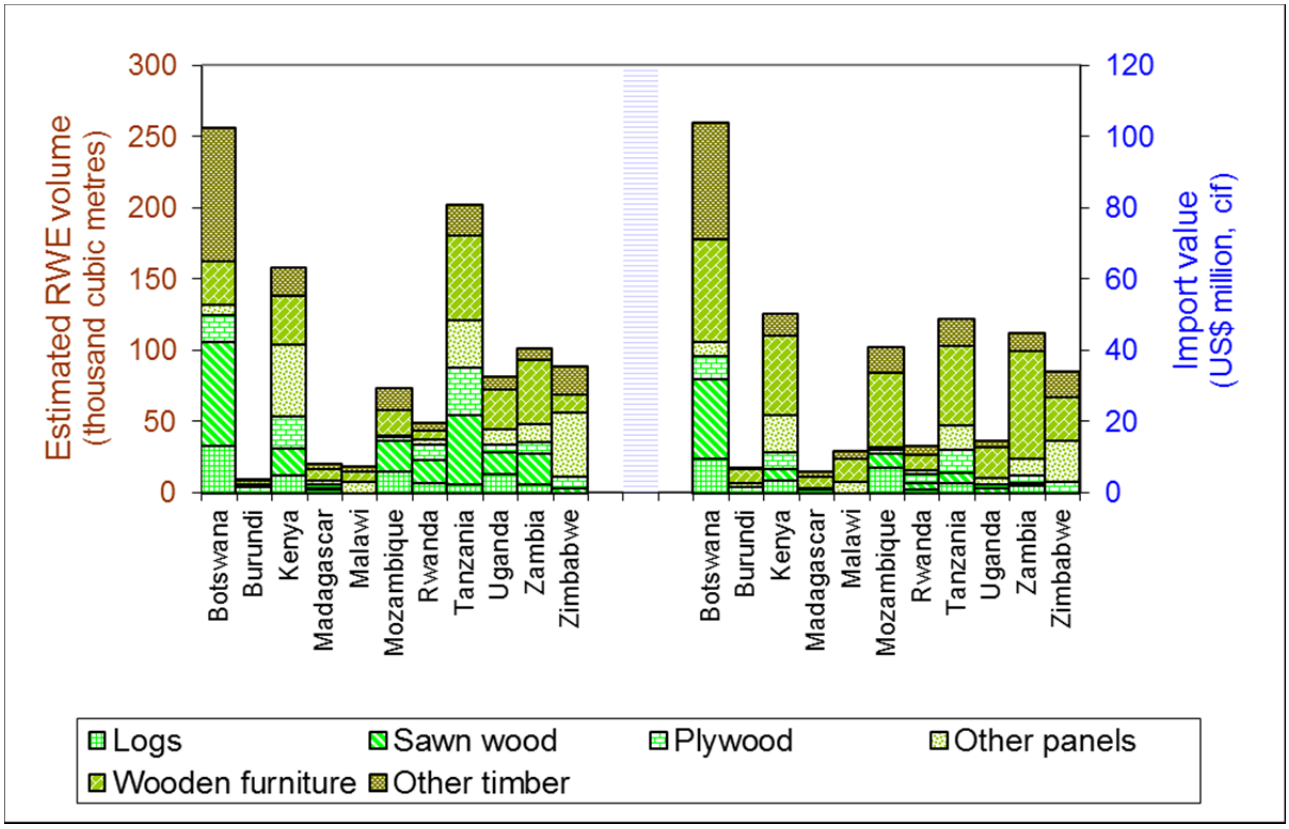


**Figure 14 Timber Sector Imports – RWE volumes and USD values – by study countries by product/ Figure 14 Importations secteur du bois – volumes équivalents bois rond et valeurs USD – par pays de l'étude par produit**

**Sources: UN Comtrade and study countries, 2012**

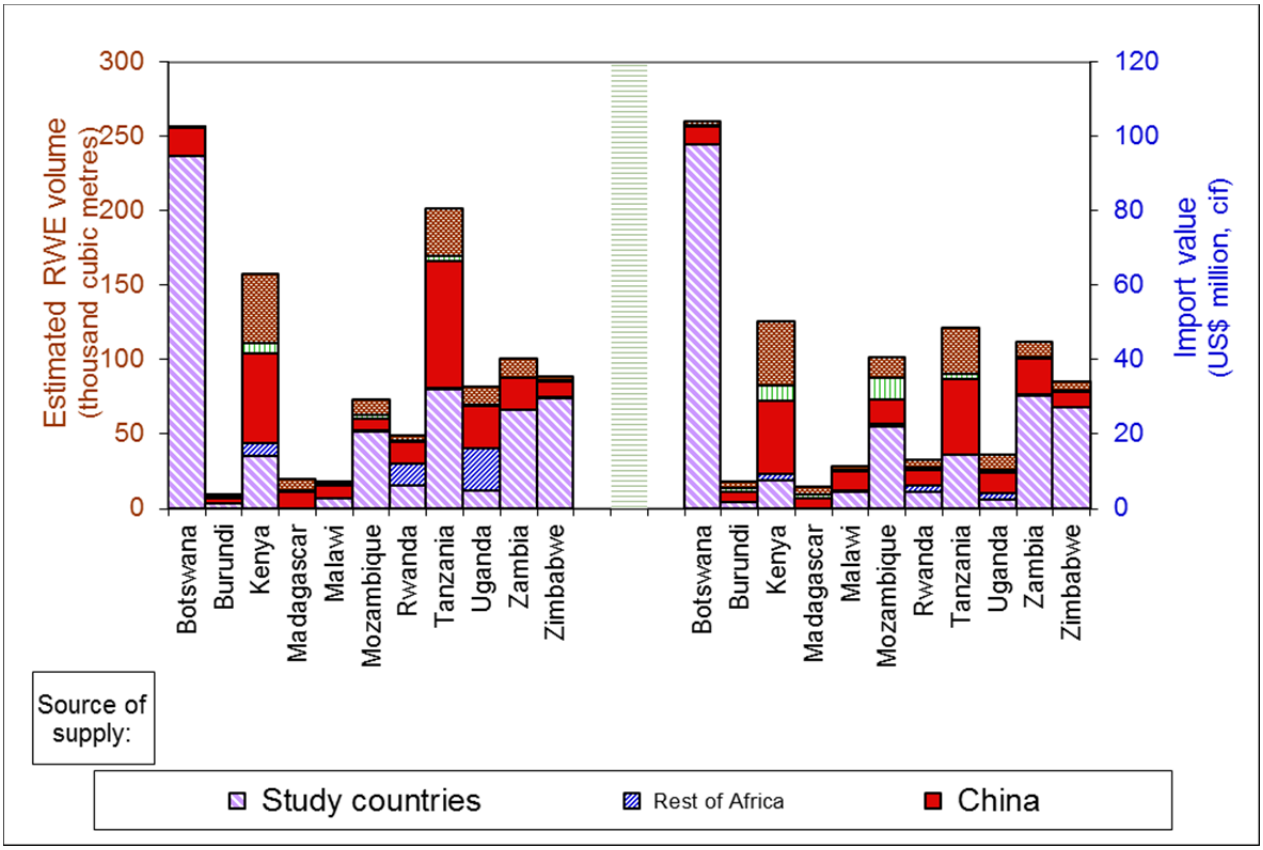


**Figure 15 Timber sector imports – RWE volumes and USD values – by study countries from other countries/**

**Figure 15 Importations secteur du bois – volumes équivalents bois rond et valeurs USD – des pays de l'étude provenant d'autres pays**

**Sources: UN Comtrade and study countries, 2012**

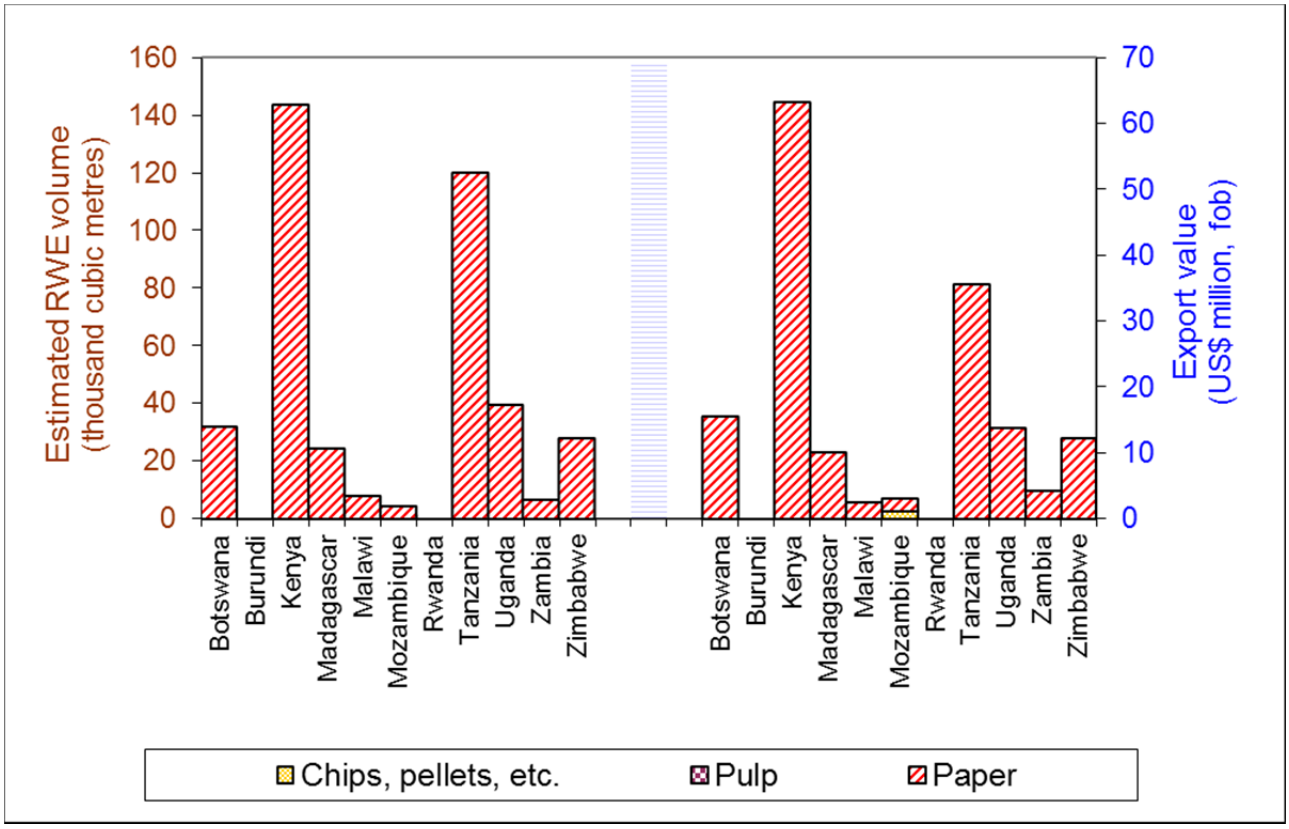


**Figure 16 Paper Sector Exports -RWE volumes and USD values – from study countries by product/ Figure 16 exportations secteur du papier – volumes équivalents bois rond et valeurs USD – des pays de l'étude par produit**

**Sources: UN Comtrade and study countries, 2012**

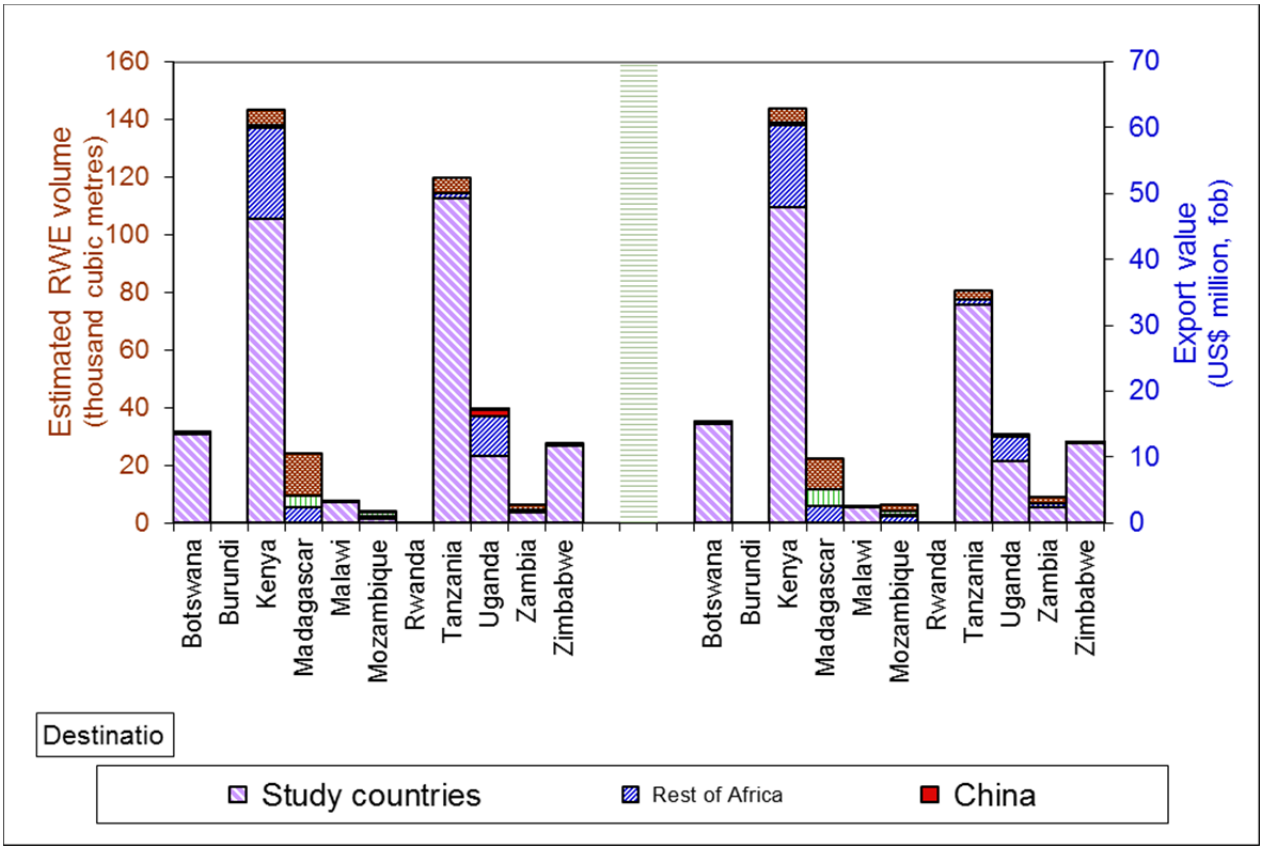


**Figure 17 Paper Sector Exports – RWE volumes and USD values - from study countries by destination/ Figure 17 Exportations secteur papier – volumes équivalents en bois rond et valeurs USD – des pays de l'étude par destination**

**Sources: UN Comtrade and study countries, 2012**

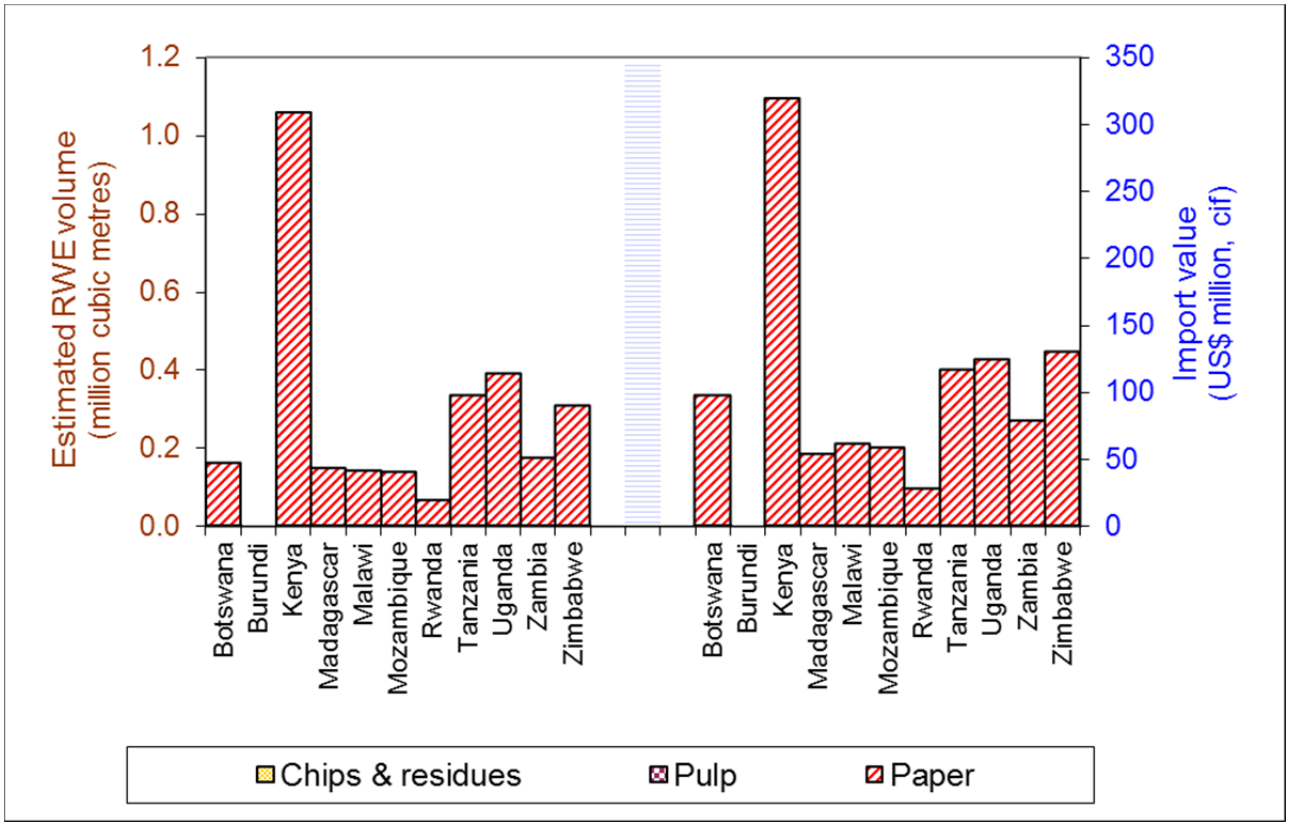


**Figure 18 Paper Sector Imports – RWE volumes and USD values – by study countries by product/ Figure 18 Importations secteur papier – volumes équivalents en bois rond et valeurs USD – des pays de l'étude par produit**

**Sources: UN Comtrade and study countries, 2012**

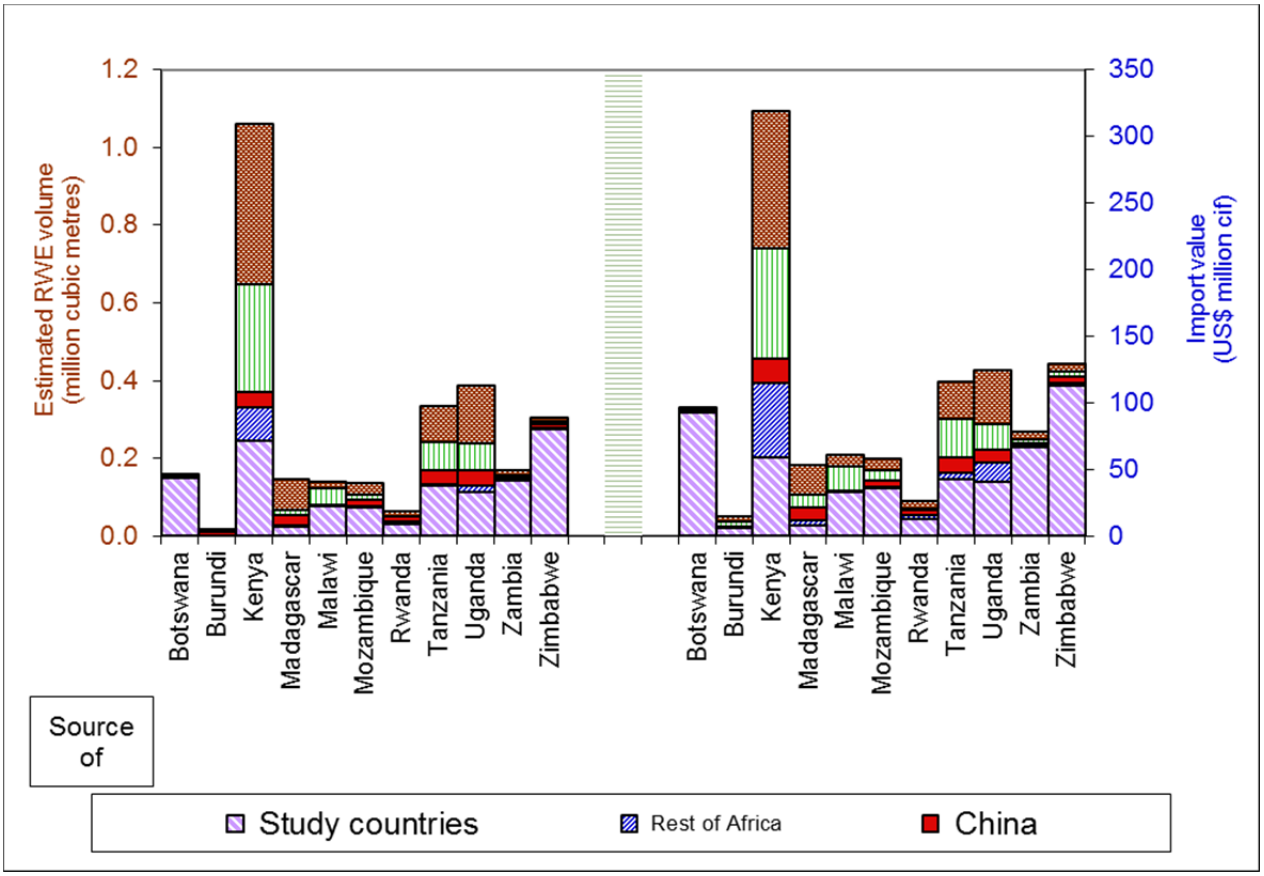


**Figure 19 Paper Sector Imports – RWE volumes and USD values – by study countries from other countries/ Figure 19 Importations secteur papier – volumes équivalents bois rond et valeurs USD – des pays de l'étude provenant d'autres pays**

**Sources: UN Comtrade and study countries, 2011**

## countries' trade in wood-based products, 2011, by product (RWE volume)

**es' trade in wood-based products, 2011, by product (RWE volume)/ Tableau 4 Commerce de produits dérivés du bois des pays de (volume équivalent bois rond)**

| ana | Burundi | Kenya | Madagascar | Malawi | Mozambique | Rwanda | South Africa | Tanzania | Uganda | Zambia | Zimbabwe |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Timber sector imports | | | | | | |
| | 0 | 13 | 3 | 0 | 15 | 7 | 1 | 6 | 13 | 6 | 1 |
| | 0 | 19 | 0 | 0 | 21 | 16 | 465 | 49 | 16 | 22 | 3 |
| | 10 | 127 | 17 | 18 | 37 | 27 | 806 | 148 | 53 | 74 | 86 |
| | | | | | Timber sector exports | | | | | | |
| | 0 | 0 | 1 | 1 | 62 | 1 | 107 | 4 | 15 | 1 | *55* |
| | 0 | 1 | 58 | 53 | 220 | 0 | 65 | 129 | 0 | 70 | *43* |
| | 0 | 43 | 5 | 26 | 19 | 3 | 311 | 110 | 20 | 8 | *38* |
| | | | | | Paper sector imports | | | | | | |
| | 0 | 6 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 287 | 0 | 0 | 0 | 3 |
| | 18 | 1,054 | 147 | 141 | 136 | 65 | 2,580 | 335 | 388 | 171 | 302 |
| | | | | | Paper sector exports | | | | | | |
| | 0 | 0 | 0 | 0 | 1 | 0 | 3,480 | 0 | 0 | 1 | 1 |
| | 0 | 1 | 0 | 0 | 0 | 0 | 4,402 | 0 | 0 | 0 | 0 |
| | 1 | 143 | 24 | 8 | 3 | 1 | 1,962 | 120 | 39 | 6 | 27 |
| | | | | | Fuel sector imports | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 0 | 0 | 0 | 0 |
| | | | | | Fuel sector exports | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 5 | 1 | 0 | 61 |

**trade, 2012**

d roundwood equivalent volume (thousand cubic metres)

li and Kenya, data for 2010 is used here as a proxy for data for 2011 because the latter is not yet available.

ld not be presented to more than two significant figures.

## Annex 3 The study countries' trade in wood-based products, 2011, by product (trade value)

**Table 5 The study countries' trade in wood-based products, 2011, by product (trade value)/ Tableau 5 Commerce de produits dérivés du bois des pays de l'étude, 2011, par produit (valeur commerciale)**

| | Botswana | Burundi | Kenya | Madagascar | Malawi | Mozambique | Rwanda | South Africa | Tanzania | Uganda | Zambia | Zimbabwe |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Timber sector imports | | | | | | | | | | | |
| Logs | 10 | 0 | 3 | 0 | 0 | 7 | 1 | 1 | 3 | 1 | 2 | 0 |
| Sawn wood | 22 | 0 | 3 | 0 | 0 | 4 | 2 | 103 | 3 | 1 | 1 | 0 |
| Other timber | 72 | 7 | 44 | 6 | 12 | 30 | 10 | 420 | 43 | 13 | 42 | 33 |
| | Timber sector exports | | | | | | | | | | | |
| Logs | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 20 | 1 | 2 | 0 | *7* |
| Sawn wood | 0 | 0 | 0 | 6 | 6 | 45 | 0 | 9 | 16 | 0 | 12 | *9* |
| Other timber | 5 | 0 | 15 | 1 | 6 | 3 | 0 | 156 | 7 | 6 | 2 | *18* |
| | Paper sector imports | | | | | | | | | | | |
| Chips & residues | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Wood-based pulp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 0 | 0 | 1 |
| Paper | 96 | 15 | 318 | 54 | 61 | 58 | 27 | 1,050 | 116 | 124 | 78 | 129 |
| | Paper sector exports | | | | | | | | | | | |
| Chips & residues | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 225 | 0 | 0 | 0 | 0 |
| Wood-based pulp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 955 | 0 | 0 | 0 | 0 |
| Paper | 15 | 0 | 63 | 10 | 2 | 2 | 0 | 637 | 35 | 14 | 4 | 12 |
| | Fuel sector imports | | | | | | | | | | | |
| Firewood & pellets | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Charcoal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| | Fuel sector exports | | | | | | | | | | | |
| Firewood & pellets | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 |
| Charcoal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 2 |

**Source: based on UN Comtrade, 2012**

Unit of measure: import value or export value (US$ million, cif or fob)

Note 1: concerning Burundi and Kenya, data for 2010 is used here as a proxy for data for 2011 because the latter is not yet available.

Note 2: these figures should not be presented to more than two significant figures.

## Annex 4 The study countries' trade in wood-based products, 2011, by partner country/region (RWE volume)

**Table 6 The study countries' trade in wood-based products, 2011, by partner country/ region (RWE volume)/ Tableau 6 Commerce de produits dérivés du bois des pays de l'étude, 2011, par pays partenaire/ région (volume équivalent bois rond)**

| | Botswana | Burundi | Kenya | Madagascar | Malawi | Mozambique | Rwanda | South Africa | Tanzania | Uganda | Zambia | Zimbabwe |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Timber sector imports | | | | | | | | | | | |
| Study countries | 237 | 4 | 36 | 0 | 7 | 52 | 16 | 68 | 81 | 12 | 66 | 75 |
| Rest of Africa | 0 | 0 | 9 | 0 | 0 | 0 | 15 | 98 | 0 | 28 | 0 | 0 |
| China | 18 | 4 | 60 | 11 | 9 | 8 | 15 | 251 | 86 | 28 | 22 | 11 |
| EU-27 | 0 | 0 | 7 | 1 | 1 | 3 | 0 | 100 | 3 | 1 | 0 | 0 |
| Rest of the world | 1 | 2 | 46 | 8 | 2 | 10 | 4 | 755 | 33 | 12 | 13 | 3 |
| | Timber sector exports | | | | | | | | | | | |
| Study countries | 0 | 0 | 30 | 0 | 79 | 12 | 0 | 249 | 134 | 16 | 17 | 132 |
| Rest of Africa | 0 | 0 | 11 | 45 | 0 | 1 | 0 | 80 | 3 | 5 | 37 | 2 |
| China | 0 | 0 | 0 | 3 | 0 | 271 | 0 | 2 | 20 | 0 | 22 | 0 |
| EU-27 | 0 | 0 | 1 | 9 | 0 | 2 | 0 | 48 | 2 | 0 | 0 | 1 |
| Rest of the world | 5 | 0 | 2 | 6 | 1 | 14 | 4 | 104 | 84 | 14 | 2 | 0 |
| | Paper sector imports | | | | | | | | | | | |
| Study countries | 150 | 8 | 247 | 24 | 77 | 75 | 32 | 3 | 131 | 115 | 144 | 277 |
| Rest of Africa | 0 | 0 | 87 | 3 | 0 | 5 | 7 | 3 | 4 | 17 | 2 | 1 |
| China | 5 | 3 | 38 | 28 | 4 | 15 | 11 | 301 | 34 | 39 | 4 | 11 |
| EU-27 | 3 | 1 | 277 | 13 | 42 | 14 | 2 | 1,253 | 75 | 69 | 6 | 5 |
| Rest of the world | 2 | 6 | 412 | 78 | 17 | 28 | 14 | 1,308 | 90 | 148 | 15 | 11 |
| | Paper sector exports | | | | | | | | | | | |
| Study countries | 31 | 0 | 106 | 0 | 8 | 1 | 0 | 853 | 113 | 24 | 4 | 27 |
| Rest of Africa | 0 | 0 | 31 | 6 | 0 | 0 | 0 | 299 | 2 | 13 | 1 | 0 |
| China | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1,052 | 0 | 2 | 0 | 0 |
| EU-27 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | *1,204* | 0 | 0 | 0 | 0 |
| Rest of the world | 0 | 1 | 5 | 14 | 0 | 0 | 1 | 6,437 | 5 | 0 | 2 | 1 |

**Source: based on UN Comtrade, 2012**

Unit of measure: estimated roundwood equivalent volume (thousand cubic metres)

Note 1: concerning Burundi and Kenya, data for 2010 is used here as a proxy for data for 2011 because the latter is not yet available.

Note 2: these figures should not be presented to more than two significant figures.

# Annex 5 The study countries' trade in wood-based products, 2011, by partner country/region (trade value)

**Table 7 The study countries' trade in wood-based products, 2011, by partner country/ region (trade value)/ Tableau 7 Commerce des produits dérivés du bois des pays de l'étude, 2011, par pays partenaire/ région (valeur commerciale)**

| | Botswana | Burundi | Kenya | Madagascar | Malawi | Mozambique | Rwanda | South Africa | Tanzania | Uganda | Zambia | Zimbabwe |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Timber sector imports | | | | | | | | | | | |
| Study countries | 98 | 2 | 8 | 0 | 5 | 22 | 5 | 12 | 15 | 3 | 31 | 27 |
| Rest of Africa | 0 | 0 | 2 | 0 | 0 | 1 | 2 | 22 | 0 | 2 | 0 | 0 |
| China | 5 | 3 | 20 | 3 | 5 | 7 | 4 | 188 | 20 | 6 | 10 | 4 |
| EU-27 | 0 | 1 | 4 | 1 | 0 | 6 | 1 | 74 | 1 | 1 | 0 | 0 |
| Rest of the world | 1 | 2 | 17 | 2 | 1 | 6 | 2 | 228 | 13 | 4 | 4 | 2 |
| | Timber sector exports | | | | | | | | | | | |
| Study countries | 0 | 0 | 9 | 0 | 11 | 2 | 0 | 88 | 6 | 5 | 3 | 32 |
| Rest of Africa | 0 | 0 | 4 | 5 | 0 | 0 | 0 | 35 | 0 | 2 | 6 | 1 |
| China | 0 | 0 | 0 | 0 | 0 | 59 | 0 | 0 | 3 | 0 | 4 | 0 |
| EU-27 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 30 | 1 | 0 | 0 | 1 |
| Rest of the world | 5 | 0 | 2 | 0 | 1 | 3 | 0 | 32 | 15 | 1 | 0 | 0 |
| | Paper sector imports | | | | | | | | | | | |
| Study countries | 93 | 6 | 60 | 8 | 33 | 36 | 13 | 3 | 43 | 41 | 67 | 113 |
| Rest of Africa | 0 | 0 | 56 | 4 | 0 | 1 | 3 | 4 | 5 | 14 | 1 | 2 |
| China | 2 | 1 | 18 | 9 | 2 | 4 | 4 | 125 | 11 | 9 | 1 | 4 |
| EU-27 | 1 | 3 | 82 | 10 | 18 | 8 | 1 | 582 | 29 | 20 | 3 | 5 |
| Rest of the world | 1 | 5 | 103 | 22 | 9 | 8 | 6 | 394 | 28 | 40 | 5 | 6 |
| | Paper sector exports | | | | | | | | | | | |
| Study countries | 15 | 0 | 48 | 0 | 2 | 0 | 0 | 298 | 33 | 10 | 3 | 12 |
| Rest of Africa | 0 | 0 | 13 | 3 | 0 | 1 | 0 | 115 | 1 | 4 | 1 | 0 |
| China | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 176 | 0 | 0 | 0 | 0 |
| EU-27 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | *281* | 0 | 0 | 0 | 0 |
| Rest of the world | 0 | 0 | 2 | 5 | 0 | 1 | 0 | 946 | 1 | 0 | 1 | 0 |

**Source: based on UN Comtrade, 2012**

Unit of measure: import value or export value (US$ million, cif or fob)

Note 1: concerning Burundi and Kenya, data for 2010 is used here as a proxy for data for 2011 because the latter is not yet available.

Note 2: these figures should not be presented to more than two significant figures.

## Annex 6 Overview of key issues and findings

| Country | Burundi | Kenya | Madagascar | Mozambique | Rwanda | South Africa | Tanzania | Uganda | Zambia |
|---|---|---|---|---|---|---|---|---|---|
| Forest Resources | 234,000 ha of forests & woodlands:<br><br>45,000 ha mountain forests.<br><br>18,000 ha woodlands.<br><br>106,000 ha public tree plantations.<br><br>65,000 ha private tree plantations. | 2.1 million ha of woodlands:<br><br>1.1 million ha of indigenous forest.<br><br>80,000 ha of mangroves.<br><br>112,000 ha of government forests.<br><br>90,000 ha of private tree plantations. | 9.7 million ha of forests and woodlands:<br><br>4.6 million ha rainforest;<br><br>2.6 million ha dense dry forest;<br><br>2.0 million ha spiny woodland;<br><br>260,000 ha mangrove;<br><br>150,000 ha eucalyptus plantations<br><br>140,000 ha pine plantations | 40 million ha of forests, of which 26.9 million ha are productive, the rest inaccessible.<br><br>Extensive establishment of new tree plantations in the North. | 500,000 ha of forests & woodlands.<br><br>125,000 ha mountain rainforest (all protected areas).<br><br>25,000 ha woodlands (indigenous species).<br><br>350,000 ha of tree plantations. | 500,000 ha of indigenous forests.<br><br>40 million ha of woodlands and savannahs.<br><br>1,275,000 ha of tree plantations. | 33 million ha of forests and woodland.<br><br>13 million ha of gazetted forest reserves.<br><br>85,000 of forest plantations.<br><br>115,000 ha of mangroves. | 4 million ha of woodlands.<br><br>925,000 ha of tropical forests.<br><br>33,500 ha of Tree plantations. | Substantial forest cover, different figures given by different sources, but around 60 million ha. |
| Utilization | Limited harvesting in state plantations, over harvesting in private plantations.<br><br>Recent ban on harvesting of pine plantations and export of sawn pine wood.<br><br>National wood consumption: 6.8 | Harvesting of indigenous forests banned.<br><br>A former logging ban in government plantations recently lifted.<br><br>Plantations now produce around 180,000 m3 annually. | 5.3 million ha in existing or planned protected areas for conservation<br><br>National wood consumption:<br>9 million m3 RWE/year firewood,<br>9 million m3 RWE/year charcoal,<br>4 million m3 | The trade in timber sector products doubled in the last decade, now having even out at about 150,000 m3 RWE per year.<br><br>Big difference between licensed volumes and harvested volumes. | A ban in place on harvesting of eucalyptus poles for scaffoldings & for brick making.<br><br>Official harvest in large state plantations has been frozen.<br><br>National wood consumption roughly 4.6 million m3 | Fuelwood consumption estimated at 20 million tons in 2008.<br><br>1.7 million ha of plantations produce almost 1.9 million m3.<br><br>Indigenous forest closed to harvesting. | Total wood consumption estimated at 42 million m3, of which 40 million is fuelwood.<br><br>Sawlog supply estimated at 1,5 million m3.<br><br>About 200-250 000 transmission poles. | 3.6 million m3 of industrial roundwood. | Total roundwood production around 10 million m3, 95% of which is firewood.<br><br>Industrial roundwood production of some 0.5 million m3 |

| Country | Burundi | Kenya | Madagascar | Mozambique | Rwanda | South Africa | Tanzania | Uganda | Zambia |
|---|---|---|---|---|---|---|---|---|---|
| | million m3 RWE/year firewood + 1 million m3 RWE/year poles and sawn wood. | | RWE/year timber.<br><br>Extensive harvesting of precious hardwoods for export to China. | | RWE/year plus charcoal & firewood 0.5 million m3 RWE/year sawn wood. | | 40 000 tons of kraft produced. | | |
| Illegal harvesting | Illegal harvesting has decreased since 2003 but is still an issue everywhere. | Illegal activities have decreased significantly with the recent introduction of a para-military law enforcement unit in the KFS | Protected areas fairly well protected except for precious wood logging;<br><br>Most wood harvesting is illegal (without permit). | Illegal logging widespread and on the increase. | Practically no illegal harvesting in forest protected areas.<br><br>Some illegal harvesting in public plantations. | Illegal harvesting is not an issue, except for occasional theft of timber from commercial plantations | Illegal harvesting and trade in forest products is far reaching, particularly illegal pit sawing in the indigenous forests. | Illegal harvesting and trade in forest products is widespread. | Several cases of dubious practices reported in recent years, including illegal logging, abused concessions, misuse of hammers etc. |
| Forest Industries | Pit-sawyers produce all timber.<br>No sawmills, Some joinery, carpentry and furniture making industry. | Some 10 sawmills one veneer and one board factory, all operating at below capacity. | Pit-sawyers produce most of the timber.<br><br>Decline of industrial processing of wood.<br><br>A few sawmills, 1 fibreboard plant, some joinery, carpentry and furniture making. | Little recent information available on forest industries. A figure of 123 operational units has been mentioned.<br><br>The many Chinese operators use bandsaws to simply cut up logs before loading the sawn wood in containers. | Pit-sawyers produce all timber.<br><br>No sawmills; Some joinery, carpentry and furniture making industry. | Well-developed forest industry with capacity adjusted to the raw material supply. | The industry is dominated by sawmilling, around 400 small mobile units and many pit sawyers, and furniture makers.<br><br>One pulp and paper mill at Mufindi.<br><br>7 pole treatment plants. | Pit-sawyers produce most of the timber.<br><br>Few sawmill.<br><br>The industry is made up of old and cheap machinery. | 100 units of small bush type sawmills, some 10 units medium to large sawmills, 3 mills producing veneer and plywood plus local furniture makers<br><br>Pitsawing widespread, targeting hardwoods. |
| Timber Trade | No export to EU, negligible exports of wood | No export to EU, small volumes to neighbouring | Exports to EU have declined to 15 000 m3 RWE | Small volumes to EU, around 5000 m3 RWE, of | No export to EU, very small exports of wood | Substantial export to EU of fuelwood and | Export of timber on the increase, at the level of | No export to EU, but to neighbouring | No export to EU.<br><br>34,000 m3 of |

| Country | Burundi | Kenya | Madagascar | Mozambique | Rwanda | South Africa | Tanzania | Uganda | Zambia |
|---|---|---|---|---|---|---|---|---|---|
| | products to other destinations.<br><br>2,000 m3 RWE per year of sawn hardwoods illegally imported from DRC and a smaller amount from Tanzania.<br><br>Increasing imports of 9,000 m3 RWE/year of other timber sector products from countries of the region and China. | countries.<br><br>Major imports from DRC, Tanzania and South Sudan, 75,000 m3 of softwood, 19 000 m3 of hardwoods plus poles. | per year mainly from pine plantations.<br><br>Very significant exports to China, 270,000 m3 in 2010 including 20,000 m3 of rosewood.<br><br>Some softwood exports to nearby Indian Ocean Islands.<br><br>Small but Increasing imports of wood products. | flooring.<br><br>Significant volumes of sawn timber exported to China. | products at all.<br><br>14,000 m3 RWE/ year of sawn hardwoods imported from DRC.<br><br>Increasing imports: 20,000 m3 RWE/year of other timber sector products from countries of the region and China. | paper.<br><br>2,000 m3 RWE from indigenous forests.<br><br>19 million m3 RVE from plantations, of which 70% is for pulp and paper production and 20% for sawmilling. | 310 000 m3. Kenya is a major market for plantation timber.<br><br>India a traditional export market for plantation teak.<br><br>Illegal imports of sawn timber from Mozambique, some of which is in transit. | countries, mainly hardwoods.<br><br>Also imports from neighbours, particularly from DRC, also in transit to third countries | sawn logs and 10,000 m3 of logs.<br><br>China and Taiwan followed by RSA are the main receivers |
| Control of Timber Movement | Control of movements of wood are carried out by police with moderate effectiveness.<br><br>Entry of wood into the capital not effectively monitored | Controls over harvesting and movement of timber are largely ineffective | Controls normally carried out by the forest administration and the police force over harvesting and movement of timber are largely ineffective. | No control over harvesting and movement of timber. | Fairly strict controls made of commercial movements of wood by police based on the "transport permit" | With most forests being FSC certified, there is good control of timber movements. | Controls over harvesting and movement of timber are largely ineffective | Controls over harvesting and movement of timber are largely ineffective | No control over harvesting and movement of timber. |
| Certification | No forests in the country certified. | No forests in the country are certified | 1 pine plantation concession of 1000 ha equipped with 2 sawmills is FSC certified. | There are three FSC certified forests. | No forests in the country are certified. | 82% of the plantations and most indigenous forest are certified. | One forest, 30,000 ha certified. Some interest among private investors. | There are two certified forests, both legally gazetted national parks. | Two forests FSC certified some 10 years ago have since been suspended. |
| Timber Tracking | No timber tracking system | No effective system or | No system of timber tracking | No system in place except in | No timber tracking system | With almost all plantations and | No system in place. | A system identified and | No system of timber tracking |

| Country | Burundi | Kenya | Madagascar | Mozambique | Rwanda | South Africa | Tanzania | Uganda | Zambia |
|---|---|---|---|---|---|---|---|---|---|
| | in place | procedure in place to trace origin. | currently in use nationwide.<br><br>A full timber tracking system designed and tested in 2007-08 but has not been deployed. | relation to the FSC certified areas. | in place. | indigenous forest being FSC certified, tracking is in place and each harvested log is given a 6 digit code. | | established but not being used fully | currently in use. |
| Export Procedures | As exports of wood-based products are minor, a standard procedure for exports of goods is applied<br><br>As part of the membership to EAC, customs procedures and facilities are being modernized. | No major export of sawn timber but some manufactured wood-based products are being exported | Export regulations have been changing repeatedly (bans & lifting of bans), the main driver being the precious wood sector.<br><br>Current export procedures very strict, but implementation is weak. | The enforcement of the system is poor, or absent. | The export of wood based products is small and follows the same procedure as for the great majority of commodities. | Satisfactory practice. | Detailed, step by step, procedure exists which includes the inspection of the good before export, but implementation is slack. | Export of timber from Uganda is prohibited by law, but still takes place | Procedures are seldom followed. |
| Trends | Forest governance is improving little by little but is still weak.<br><br>Poor national public funding of the sector remains a limiting factor to improvement.<br><br>A new forest law | Reforms within the forest sector on-going.<br><br>Plantations mismanaged in recent years, but the extent of planting now increasing | Limited prospects of improvements as regards precious wood and illegal logging due to huge demand.<br><br>Likely extirpation of rosewood species in the coming years but likely switch to other hardwood | Declining forest covers due to logging, charcoal making, slash and burn agriculture etc.<br><br>Illegal logging widespread and on the increase, above all of precious hardwood species to China. | Afforestation efforts expected to continue.<br><br>High expectations of the coming enaction of a New Forest Law.<br><br>Increased involvement of private sector in the management | Due to shortage of suitable land, forest plantations not likely to expand. Productivity increasing on existing lands.<br><br>Precious hardwood species might pass RSA in transit. | Reforms within the sector is ongoing.<br><br>Heavy pressure on the natural forest from illegal pit sawyers.<br><br>Private investors undertaking management of government | There is a serious timber shortage and Uganda is now importing timber. The cross-border trade is in need of regulation | Forest degradation wide spread.<br><br>Forest governance is in crises, with law enforcement particularly weak.<br><br>Systems for forest management not |

| Country | Burundi | Kenya | Madagascar | Mozambique | Rwanda | South Africa | Tanzania | Uganda | Zambia |
|---|---|---|---|---|---|---|---|---|---|
| | will soon apply.<br><br>Systems for management of public woodlands involving local communities are being tested. | | species.<br><br>Notwithstanding precious wood issues, huge need to resume efforts towards effective and sustainable management of forest resources. | Illegal logging also in national parks and nature reserve.<br><br>Absence of forest governance well known but no action has been taken. | of public plantations.<br><br>Some industrial wood processing units are being introduced some exports of their products. | Regulations and procedures for importation of timber quite relaxed. | plantations, also expanding.<br><br>Local communities are successfully managing village land forest reserves. | | in place.<br><br>Need for a reform process of the sector. |
| | | | | | | | | | |

## Annex 7 Summary of the Burundi Country Report

Burundi has a total land area of 2.8 million ha with an estimated population of approximately 8.4 million people. The county is forested at about 10%, consisting of 45,000 ha of indigenous forests, 35,000 ha of woodlands and as much as 170, 000 of forest plantations.

Most of the indigenous forests and woodlands are protected areas and not open to wood production. The bulk of forest resources that can be harvested are in the plantations. The recent history of the country has been marked by a period of unrest during which time the forest resources were seriously affected as the framework of forest governance and management collapsed. Outside protected areas, in spite of the serious land scarcity in Burundi and competition between forestry and agriculture, trees are very present in the landscape in most areas. The plantations were mainly established during the 1980s with support of international donors.

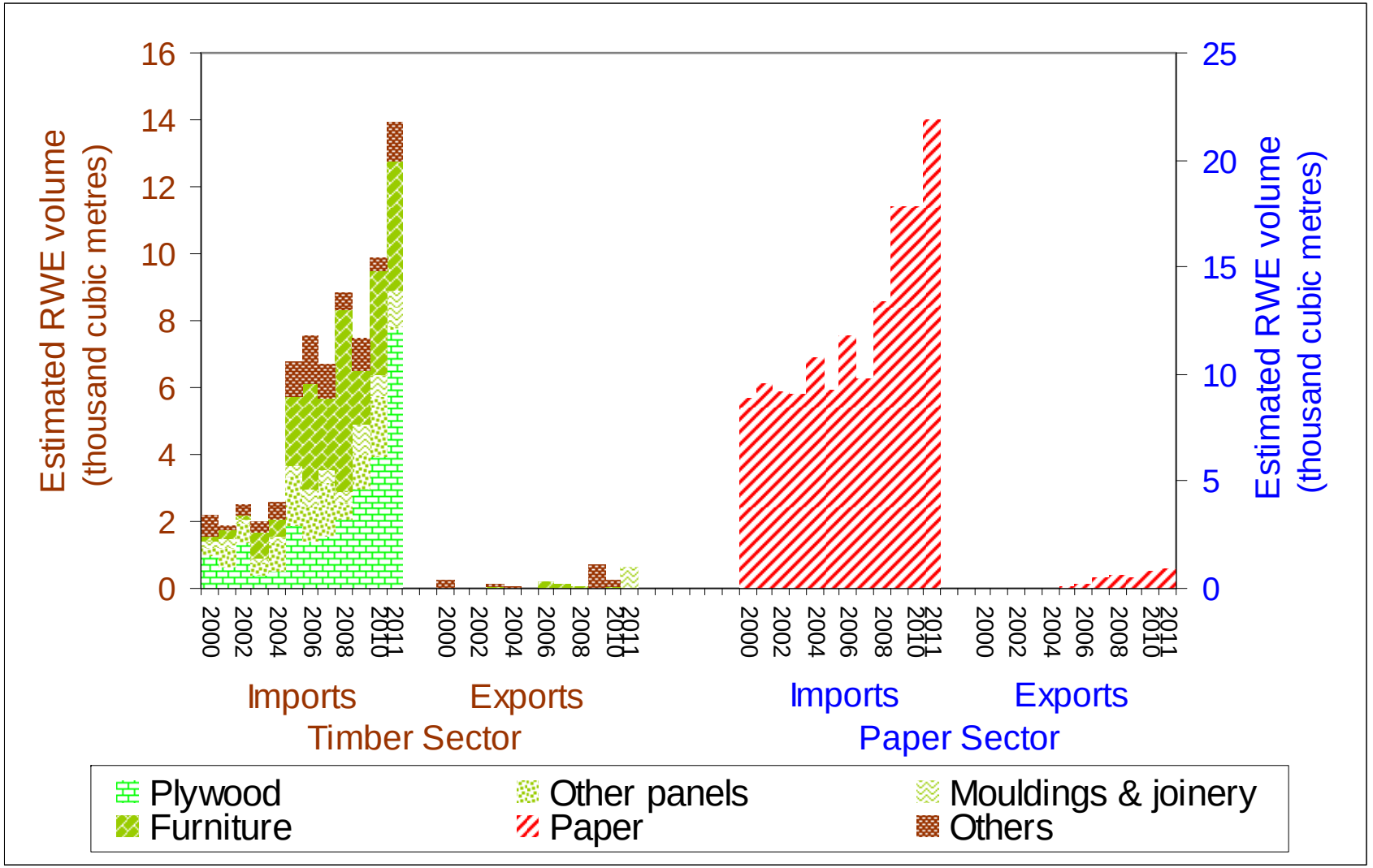


**Figure 20 Burundi's trade in wood-based products (2000-2011)/ Figure 20 Le commerce de produits dérivés du bois au Burundi (2000-2011)**

Source: based on UN Comtrade 2012; Note: data provided by the source on imports of paper sector products in 2009 seemed anomalous and have been revised in 2012.

As can be seen from the above figure, exports of wood-based products by Burundi are close to zero with less than 1,000 m3 RWE per year. Paper is re-exported. There are no recorded exports of fuelwood products. Exports of Burundi to EU-27 of all wood-based products are nil. The national demand of sawn wood is mainly met by softwood produced in plantations, the main species being *Grevillea robusta*, and eucalyptus

Burundi's imports of wood based products have increased since 2000, having reached a level of around 25,000 $m^3$ RWE per year. Out of this volume, paper imports represent about 80%. As regards timber products imported, these are all processed as Burundi does not seem to import logs and sawn wood.

There are no particular provisions on exports in the forest legislation, apart from one Ministerial Order of 2010 banning the export of sawn pine and *Callitris* wood, which tends to be enforced. Among the documents required to export wood based products from Burundi is an export licenses issued by the National Bank of Burundi.

The Ministry of Water, Environment, Land Use Planning and Urbanism is responsible for the management of forests and forest plantations. Within that ministry, indigenous forests in protected areas are managed for conservation objectives by the National Institute for Environment and Nature Conservation. Woodlands outside of protected areas are the responsibility of the Department of Forests, which belongs to the General Direction of Forestry and Environment within the same ministry.

The Forest Policy dates back to 1984 and it is outdated. A draft for a new National Forest Policy (2012-2025) has been prepared recently. This policy, which is expected to be approved in 2013, is aiming at rehabilitation of the depleted forest resources, encourage decentralization, privatization and increased participation of civil society. Fairly comprehensive forest legislation exists, with the Forest Law being from 1985, but its application is a major problem. A proposed a new forest law has been prepared in 2012 which puts emphasis on the involvement of local communities in forest management.

Harvesting in state woodland requires a cutting permit, stipulating a specific number of standing trees, issued by the General Direction of Forestry and Environment. Cutting permits are issued to individuals or offered at auctions. Following a Ministerial Order of 2009, some of the state woodlands are under participative management, as a pilot operation. For private woodlands the owner has to prepare and submit a management plan together with a logging plan, detailed in another Ministerial Order of 2000. For the actual harvesting, a cutting permit still applies. To transport wood products after felling requires an authorization to transport, which is issued to the logger or wood trader by General Direction of Forestry and Environment. The policy force plays an important role in the control of the transport of wood.

Transparency in forest sector is not well developed but this seems to result more from a lack of capacity than from an intention not to provide information. The web sites of the forest institutions do not publish regulations in a systematic and comprehensive way and many sections of these sites are empty or not functioning.

There are currently no certified forestry operations in Burundi. Understandably, no national standards have been developed.

About 95% of rural households use firewood and 80% of the urban population use charcoal for cooking, meaning that 95% of the energy needs are in the form of fuelwood.

With almost all indigenous forests and woodlands being set aside as protected areas for conservation, most wood based products are coming from plantations. The supply and demand situations for wood based products are not in balance, as it is more and more difficult for operators to find raw material especially certain qualities and sized. This shortage might lead to overharvesting and increased imports. Smaller amounts of sawn indigenous hardwood and charcoal are imported illegally from Tanzania to the eastern

provinces of Burundi, coming from miombo woodland species. Burundi is receiving limited amounts of sawn hardwoods from D.R. Congo, mostly illegal.

What happens in D.R. Congo as regards forest resources is of great concern to all the countries in the Great Lakes region.

The forest industry is not well developed with all harvesting operations as well as processing are being done by hand using manual labour. There are no sawmills in operation. Some entrepreneurs involved in the first processing of timber in the woodlands use chainsaws for sawing the wood into planks, which is quite wasteful.

With the on-going growth of the economy as well as the population, imports of wood based products can be expected to increase, with exports not likely to grow significantly. There is limited scope for an expansion of forest plantations as there is scarcity of available land. With the on-going reforms forest governance is expected to improve together with forest management and private investment in forestry.

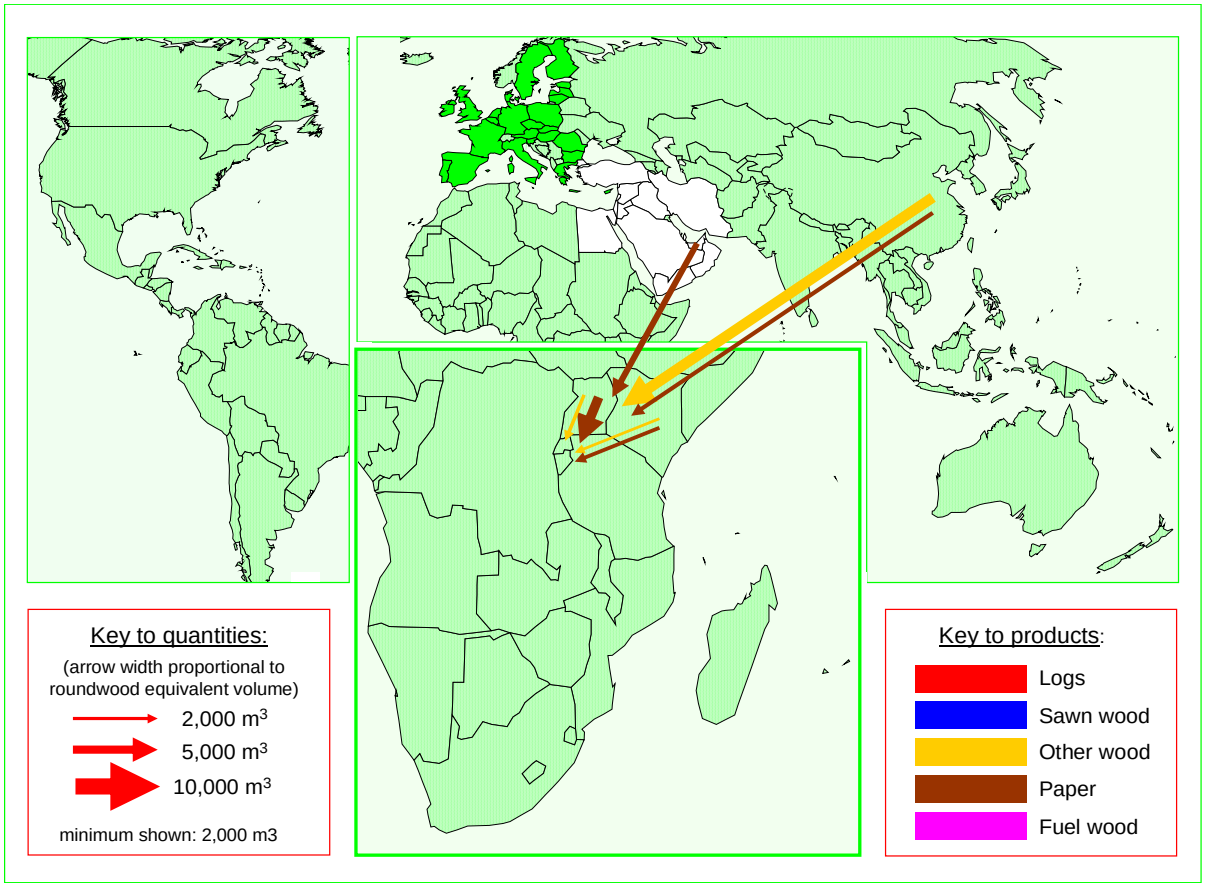


**Figure 21 Map showing Burundi's trade in wood-based products (2011)/ Figure 21 Carte illustrant le commerce de produits dérivés du bois du Burundi (2011)**

**Source: Based on data provided by Burundi and presented in UN Comtrade, 2012**

## Annex 8 Summary of the Kenya Country Report

Forest cover in Kenya comprises indigenous forests (1.1 million ha), mangrove forests (80,000 ha), state forest plantations (112,000 ha) and private commercial plantations (over 90,000 ha).

State forests are divided in gazetted and un-gazetted forests that have a total area of 2.35 million hectares (1.57 million gazetted and 0.78 million ungazetted). The gazetted area was 1.7 million ha initially but has been reduced to 1.57 million ha through encroachment and government exercised excisions during the period 1980 - 2000. This decline of forest covers is continuing *albeit* at a slower pace. On the other hand, extensive planting and the establishment of trees on farms in agroforestry systems have created a substantial raw material base.

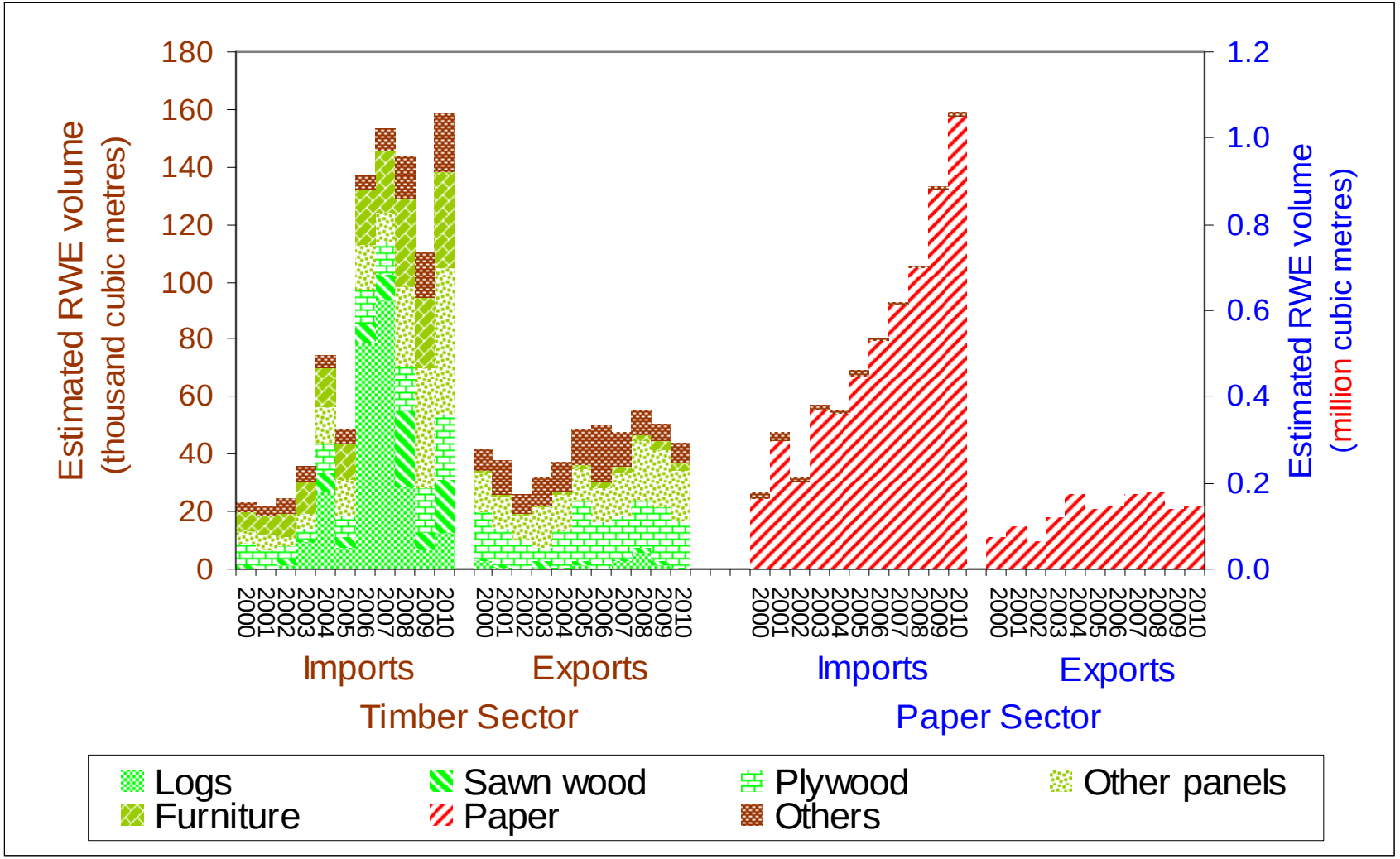


**Figure 22 Kenya's trade in wood-based products (2000-2010)/ Figure 22 Le commerce de produits dérivés du bois au Kenya (2000-2010)**

**Source: Based on data provided by Kenya and presented in UN Comtrade, 2011**

As can be seen from the above figure, Kenya is a net importer of, particularly, sawn timber, panel products, paper, furniture and transmission poles. The source is mainly Tanzania, D.R. Congo, South Sudan, Malawi and Mozambique. Kenya's import of timber has tended to increase since the last ten years. In 2011, timber worth US$ 50 million was imported. Kenya's imports of paper are increasing rapidly, supplied mainly by South Africa and the EU.

No major export of timber originating from Kenya forests has occurred for the last ten years as domestic demand is very high. Still, wood based products have been exported including plywood, different kinds of boards, carvings and hardwood furniture.

A host of problems surround the timber trade in Kenya including under-declaration of volumes, misreporting on species, forging of documents, smuggling across border etc. Regarding imports, no serious attempts are being made to establish legality of imported timber. In effect, large volumes of illegally acquired timber are imported into the country.

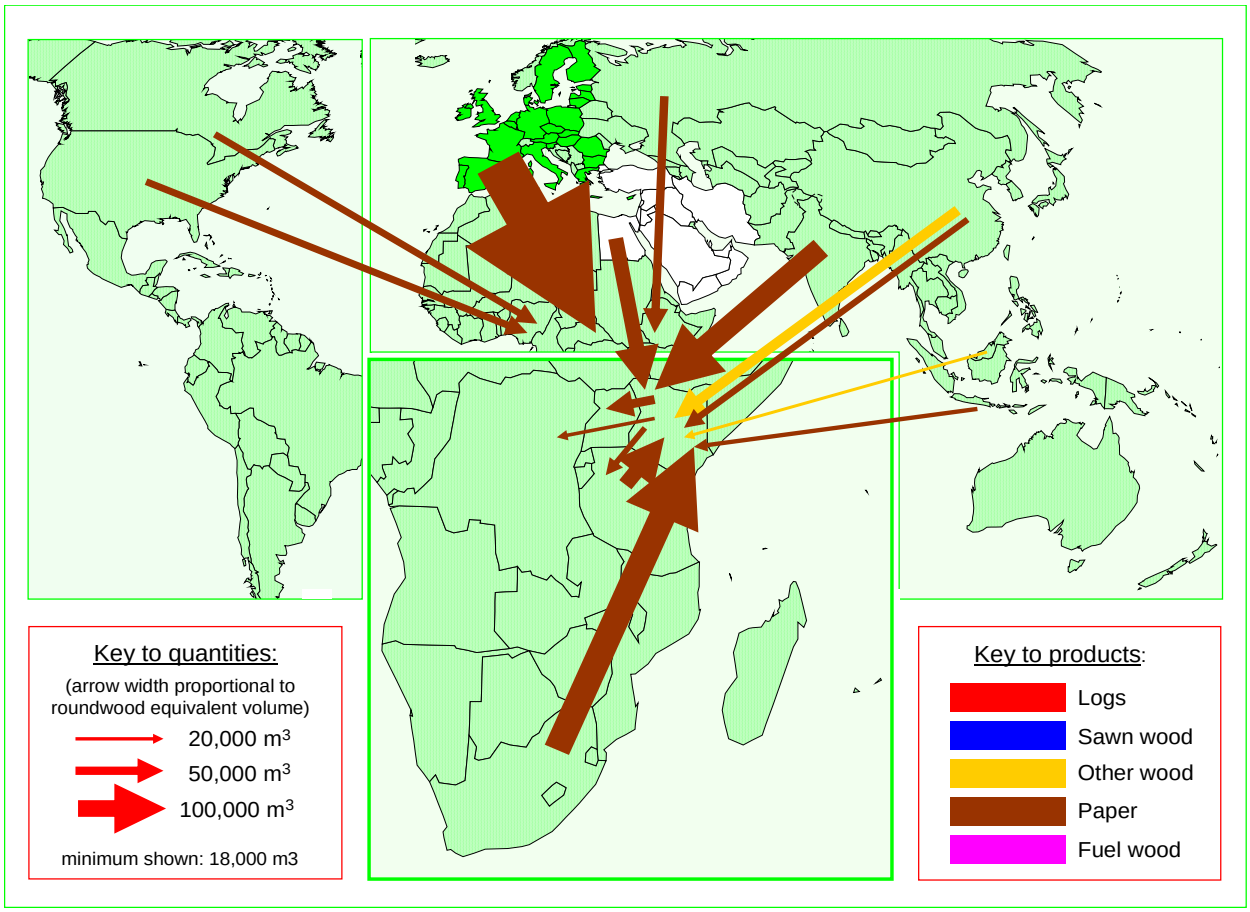


**Figure 23 Map showing Kenya's trade in wood-based products (2011)/ Figure 23 Carte illustrant le commerce de produits dérivés du bois du Kenya (2011)**

**Source: Based on data provided by Kenya and presented in UN Comtrade, 2012**

In the 1970s and early 1980s forest plantations in Kenya produced 1 million $m^3$ of industrial logs annually and supported 500 sawmills, a chip board factory, 3 plywood mills, a fibre board mill and a paper mill, in addition to a strong industry supporting thousands of manufacturers of furniture, flooring, building components and industrial pallets.

Then, in the mid-1980s, the forestry sector started to decline with 40,000 ha of the plantation areas being excised, cleared and allocated for settlement. Other areas suffered from illegal harvesting. Replanting of harvested areas lagged behind. By the late 1990's, the forest estate was in a very poor state and could no longer supply adequate raw material for the industry. In a last attempt to save the remaining forests, the government of Kenya issued a decree in 1999 that banned all logging in state forests. This marked the end of the forest industry in Kenya. The decline of the forest was caused mainly by politically motivated conversion of forests to settlement and extensive illegal harvesting.

In 1995, with donor support, the Kenya Forestry Master Plan was adopted. It recommended policy, legal and institutional reforms to modernise forest management. Indeed reforms were done and the country now has a new Forest Policy from 2007 and a Forest Law from 2005. In 2007 the Kenya Forest Service was established, replacing the old Forestry Department, to implement forest policy and the Kenya Forestry Master Plan. Kenya Forest Service is a parastatal established by the Forest Act of 2005 to conserve, develop and sustainably manage forest resources for Kenya's social-economic development. The responsibility of overseeing the implementation of forestry policy in the country is delegated to the Ministry of Forests and Wildlife.

Kenya Forestry Service is the only body authorized to issue licenses for the harvesting of forest products and currently harvesting is only allowed in forest plantations. Five year harvesting plans have been prepared for the plantation areas with harvesting rules and regulations having been formulated, to enable the allocation of harvesting rights. A new system of auctions is about to be introduced to auction mature plantations for sale so that eligible operators can place bid. Kenya Forest Service further intends to place some of the forest plantations under management concession arrangements.

Kenya has adequate laws and policies for effective governance and transparency in the forestry sector. The recent reforms of the sector have created more effective administrative and management systems for implementing and promoting good forest governance. However, Kenya Forest Service is still a young institution. All the same there are clear indications that the sector is improving through better revenue collection and use of its revenue. Political goodwill is forthcoming and the state of forests and forest industry are improving. The reforms have paid special attention to forest law enforcement and in this regard a very special "Enforcement and Compliance Unit" was created, which is an armed force that is well equipped with ground transport, winged aircraft, helicopters, a VHF communication system and a staff force of 2800. Staff of the unit is given both para-military and technical forestry training and bear assault fire arms to combat crimes of all types.

Although the condition of forest resources are improving, the wood-based manufacturing industries that closed down in the late 1990's are still not back on their feet. Less than 10 sawmills exist today operating at below capacity, largely depending on logs sourced from trees planted on farms.

Current aggregate demand for wood in Kenya stands at 37 million $m^3$, including fuelwood which meets 70% of the national energy requirements. The domestic demand for fuelwood is rising especially for large consumers like the tea industry. Sustainable domestic wood supplies are estimated at 30 million $m^3$, implying a deficit of 7 million $m^3$. Supply of logs and timber comes mainly from imported plantation grown exotics and trees cultivated on farms.

The Customs services in the East African Community are being modernised as part of a trade facilitation programme among the member countries which includes collaboration between the different customs services and the exchange of data. This process includes improvement of customs infrastructure, adoption of computerised systems and adoption of standards used internationally for the coding of commodities

traded. This has greatly improved the quality of information being collected by customs authorities across the East African countries.

Reforms within the forest sector are still on-going with the institutional changes having shown positive results. The forest Industry sector is being refurbished and renewed after the lifting of the logging ban. Kenya is exporting such small quantities of wood based products to the EU that there is limited scope for the EU to enter into VPA negotiations with Kenya.

## Annex 9 Summary of the Madagascar Country Report

Madagascar has a total land area of 58 million ha and a population of 21 million.

The indigenous forests cover some 9,4 million ha, consisting of rainforests and dry forests, being characterized by unique biodiversity values and high rates of endemism. About 1,7 million ha of these forests are being protected, in the form of national parks and reserves, and the intention is to increase the area under conservation.

The area of forest plantation has increased substantially in recent years. It started with the planting of eucalyptus in the 1930s, to be followed by even large plantations of pines in the 1950s and 60s. Exact figures are not available, but the plantation resource is of the magnitude of some 250 000 ha

One characteristic of the forest resources in Madagascar is that given that the country is a world-class biodiversity hotspot and centre of species endemism, with most of it being concentrated in forest ecosystems, the policy and the management of these resources have been much influenced by conservation.

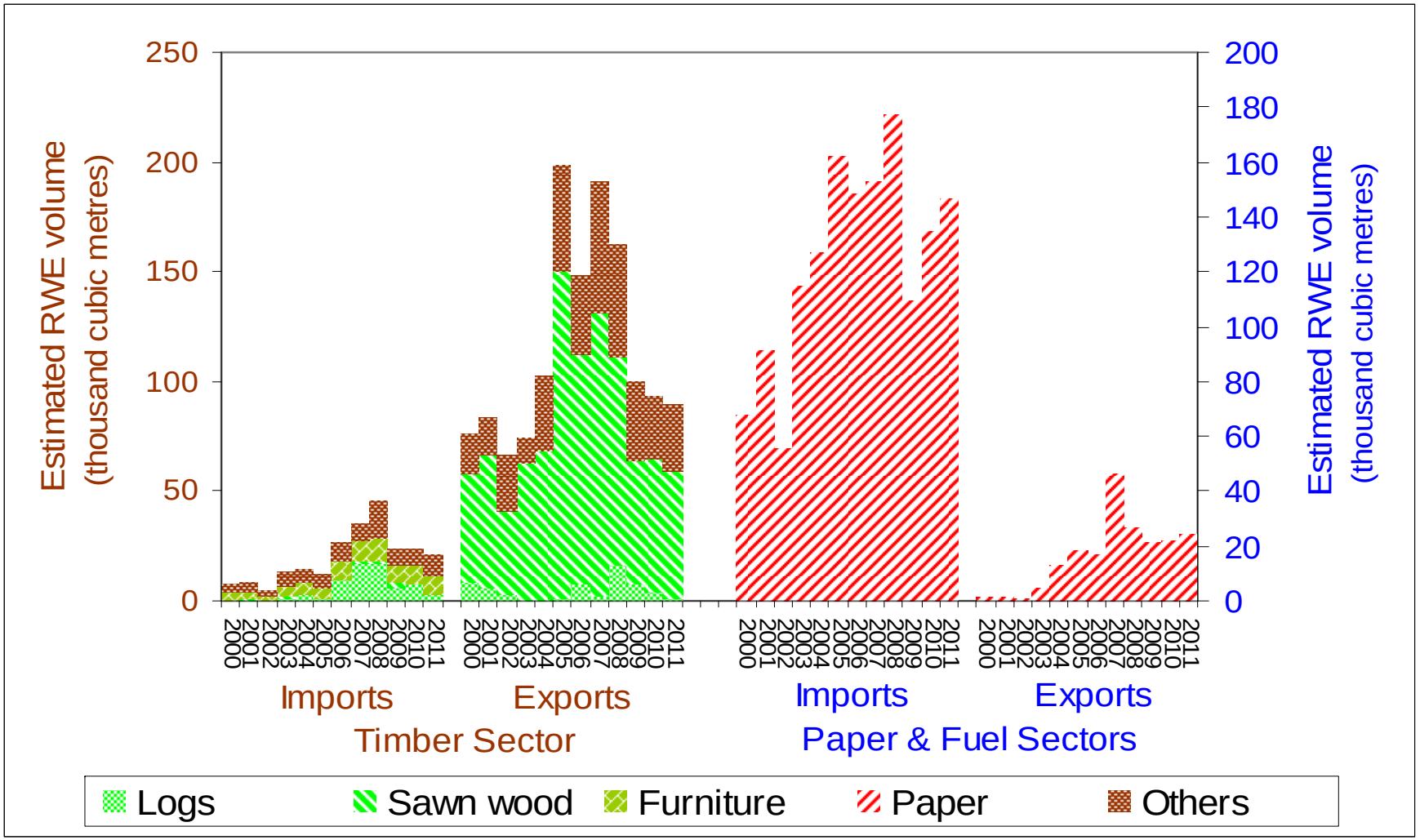


**Figure 24 Madagascar's trade in wood-based products (2000-2011)/ Figure 24 Le commerce de produits dérivés du bois à Madagascar (2000-2011)**

**Source: Based on data provided by Madagascar and presented in UN Comtrade, 2012**

That the export of wood-based products consists to 80% of sawn wood (of which more than half is softwood) can be seen from the above figure, while other wood accounts for the rest. The proportion of logs in the export of timber products has decreased significantly in recent years. And at the same time the amount of hardwoods exported has gone down from some 75% to 10%, being replaced by timber from plantations.

Three main groups of tree species exported by Madagascar are as follows: The first one is coniferous species (pine) from the plantations of the central highlands. The second one is precious hardwood timber species from the indigenous forests of the east coast and escarpment, consisting of “rosewood” (4 *Dalbergia* species) and smaller amounts of ebony (*Diospyros sp*) as well as "palissandre" (*Dalbergia sp*). Then there are other hardwood species from indigenous forests that are exported in smaller amounts. The main destination countries are France, i.e. Metropolitan France, La Réunion and Mayotte, followed by China and the non-French nearby islands in the Western Indian Ocean. This means that about half the export of timber products from Madagascar goes to the nearest islands; Mauritius, La Réunion, Mayotte and Comoros. It can be expected that those islands will continue to have a great demand for wood based products.

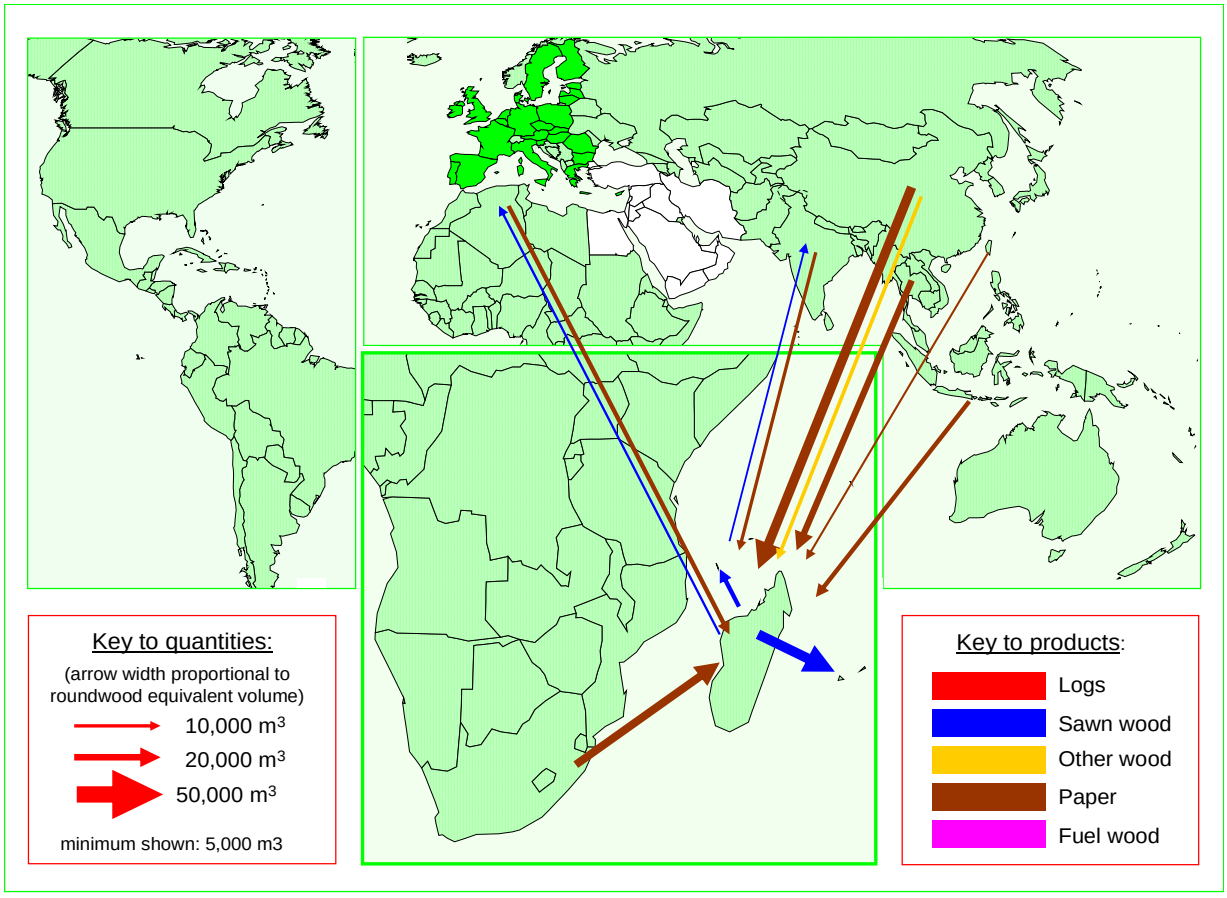


**Figure 25 Map showing Madagascar’s trade in wood-based products (2011)/ Figure 25 Carte illustrant le commerce de produits dérivés du bois de Madagascar (2011)**

**Source: Based on data provided by Madagascar and presented in UN Comtrade, 2012**

The productive forests in Madagascar are administered by the Direction General of Forests of the Ministry of Environment and Forests. Protected forest areas are managed by Madagascar National Parks as regards National Parks and Special Reserves.

The Forest Policy of Madagascar as well as the Forest Law is from 1997. The Forest Law is complemented by a series of decrees, including one from 1998 regulating logging operations. According to a ministerial order from 2006, logging of rosewood and ebony is forbidden, even outside protected areas.

The legislation regarding export of wood based products has changed many times over the years based on two parameters; the tree species and the degree of processing. There are presently three levels of processing; round wood, semi-processed wood and finished products, which leaves some space for interpretation.

The legal framework with its rules are all robust and relevant, however, law enforcement is weak, particularly as regards logging and timber trade. Limited human resources in the forest administrations and a shortage of transport prevent a presence at logging sites. Beside these logistical constraints and the scarcity of controls to enforce the law, another concern is the scarcity of real sanctions in case of ascertained illegal logging.

The forest administration does not maintain much transparency in the sector, especially on questions related to wood trade. Reliable data on the sector are not easily available, accessible and published. The procedures themselves when they are applied are in many cases not transparent as regards the issue of different types of permits, how controls and law enforcement is carried out.

A 1000 ha forest concession is the only forest operation which is certified in Madagascar. The products are sold on the domestic market or exported to neighbouring island countries.

95% of household energy needs are covered by fuelwood. The eastern rainforests are mainly providing firewood, while dry forests and woodlands of the west and south of the island are highly tapped to produce charcoal. Increasing demand for charcoal in neighbouring countries with limited forest resources could increase the pressure on the Malagasy resources. The biggest problem of the charcoal sector is that there is little control: absolutely no control of where the cutting takes place, and little control on the transport.

The processing of wood-based products in Madagascar is done in an informal way, manually or in small-scale units. Logs are often squared by hand or sawn manually in or near the forest, resulting in a poor rate of utilization. Madagascar used to have a proper wood processing industry, including sawmills distributed across the country, the production of veneer and panel products in addition to carpentry shops and industrial furniture making. But this industry has declined one after the other, due to lack of skills among opportunistic business men, unreliable raw material supply plus escalating costs of electricity. Another trend has been the reduction of French-owned industries, progressively replaced by Chinese or Indo-Pakistani operators. Today, only a few industrial sawmills are working, often including facilities to further process the wood, particularly carpentry and joinery.

The importation of wood-based products is dominated by paper. The main supplier is South Africa, followed by China and then by EU. China also supplies some processed timber products.

For a start, "legal" wood trade seems to have a very limited meaning in Madagascar. Improvements in forest management are a prerequisite without which the initiation of a FLEGT process would have limited impacts. Similarly, the development of certification schemes will be a difficult task in a situation where the most important exports are more and more towards Asia. To provide support to monitoring and disclosing of information on what is going on in the sector remains essential. At the same time, while institutional reforms are difficult to influence, it remains highly desirable to support on-site actions towards improved forest management, in the form of strengthening management to local communities and support to private forestry

## Annex 10 - Summary of the Mozambique Country Report

Mozambique, with a population of 24 million people, is forested to about 51%. Miombo forests are the most extensive formation. They are characterised by the predominance of the leguminous "messassa" genera Brachystegia, Julbernardia and Isoberlina, but there are still typically 20-30 different species per hectare. In higher rainfall areas, the forest canopy may reach 18 m high.

The first exotic plantations were established in Portuguese colonial times, based on pines and eucalypts, to supply the domestic market with construction timber. Following decades of neglect and reliance on softwood imports, there has been a resurgence of interest with a few as international companies, such as Green Resources, Portucel and the Global Solidarity Forestry Fund having applied to obtain a total of 2.1 million ha of land for tree plantations, with the intention of incorporating carbon offsets. In 2010 the area of plantations had reached 62,000 ha.

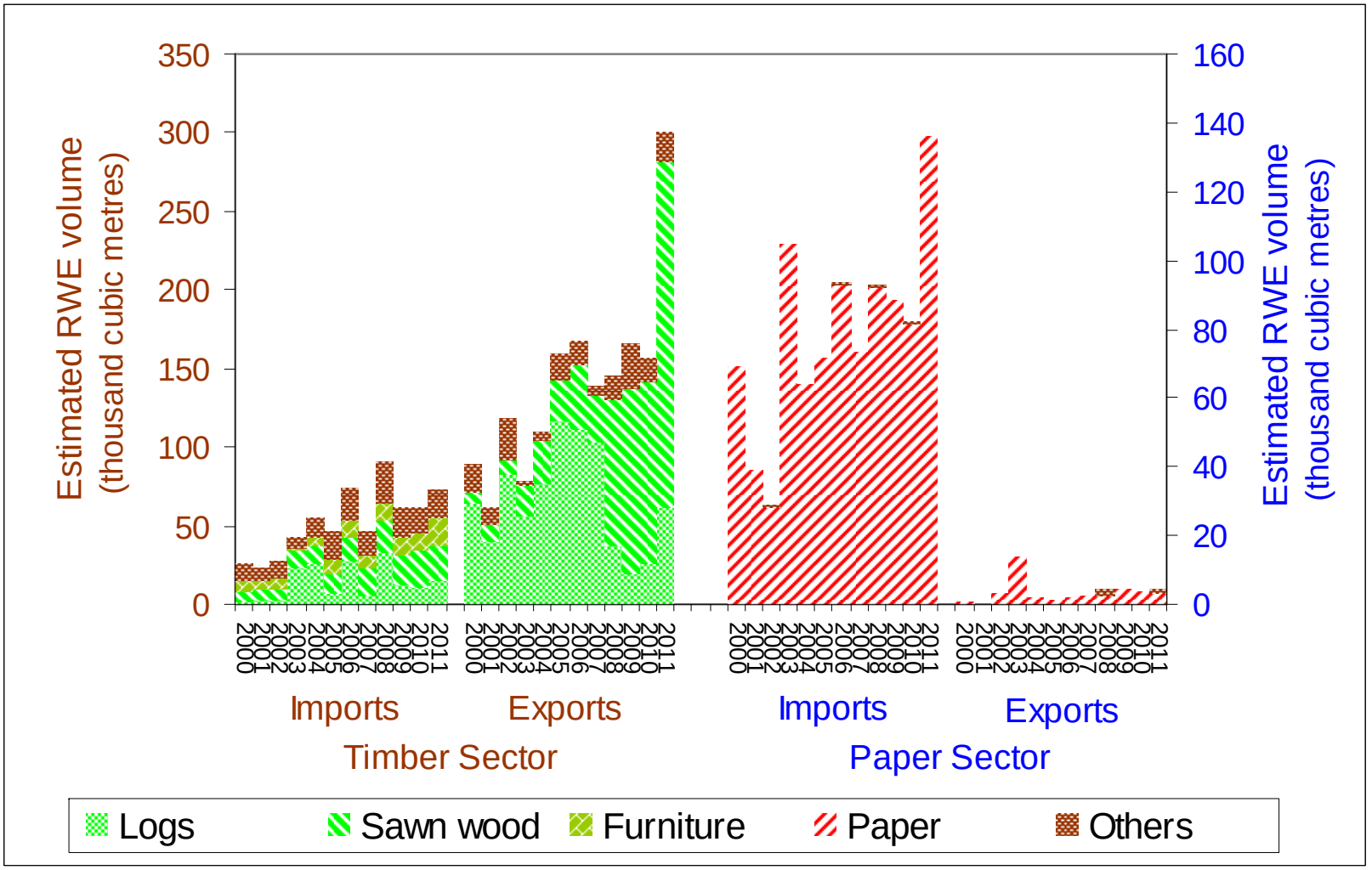


**Figure 26 Mozambique's trade in wood-based products (2000-2011)/ Figure 26 Le commerce de produits dérivés du bois au Mozambique (2000-2011)**

**Source: Based on data provided by Mozambique and presented in UN Comtrade, 2012**

As can be seen from the above figure, Mozambique's export of timber sector products doubled during the last decade, having flattened out at around 160,000 m3 *per annum* since the middle of the decade, only to be followed by a sharp increase in 2011. The trade flows is predominantly to China, and to some extent to South Africa. Timber from dark, heavy hardwood species are logged almost exclusively for export to China, primarily to be made into reproductions of Ming and Qing Dynasty furniture, other high unit value ornamentation, and, to a lesser extent, flooring.

Mozambique exports a small, declining volume of timber to the countries that are the subject of this study. During 2010, those volumes amounted for a very small proportion of the total which Mozambique exports. South Africa accounts for the great majority of this. China is the final destination for most, of the timber which Mozambique reports as exports to other countries in East Asia. The volumes exported to the EU are similarly insubstantial, almost zero during 2010.

There has been an abrupt change in the nature of Mozambique's timber exports, from primarily logs in the period 2000-2007, to the dominance of sawn timber from 2008 onwards.

Mozambique imports an increasing volume of processed softwood timber, mainly from neighbouring South Africa and Malawi (depending on which part of Mozambique). Pine is favoured in Mozambique for house construction. Treated eucalyptus is widely used for transmission poles, and imports account for much of volume used. The current building boom in Mozambique is also leading to the import of high quality joinery products, such as doors, windows and their frames. In terms of import value, furniture is the second most significant of Mozambique's imports of wood-based products after paper. Roughly half of that (increasing quantity of) furniture is supplied from South Africa, and the rest from China and Europe.

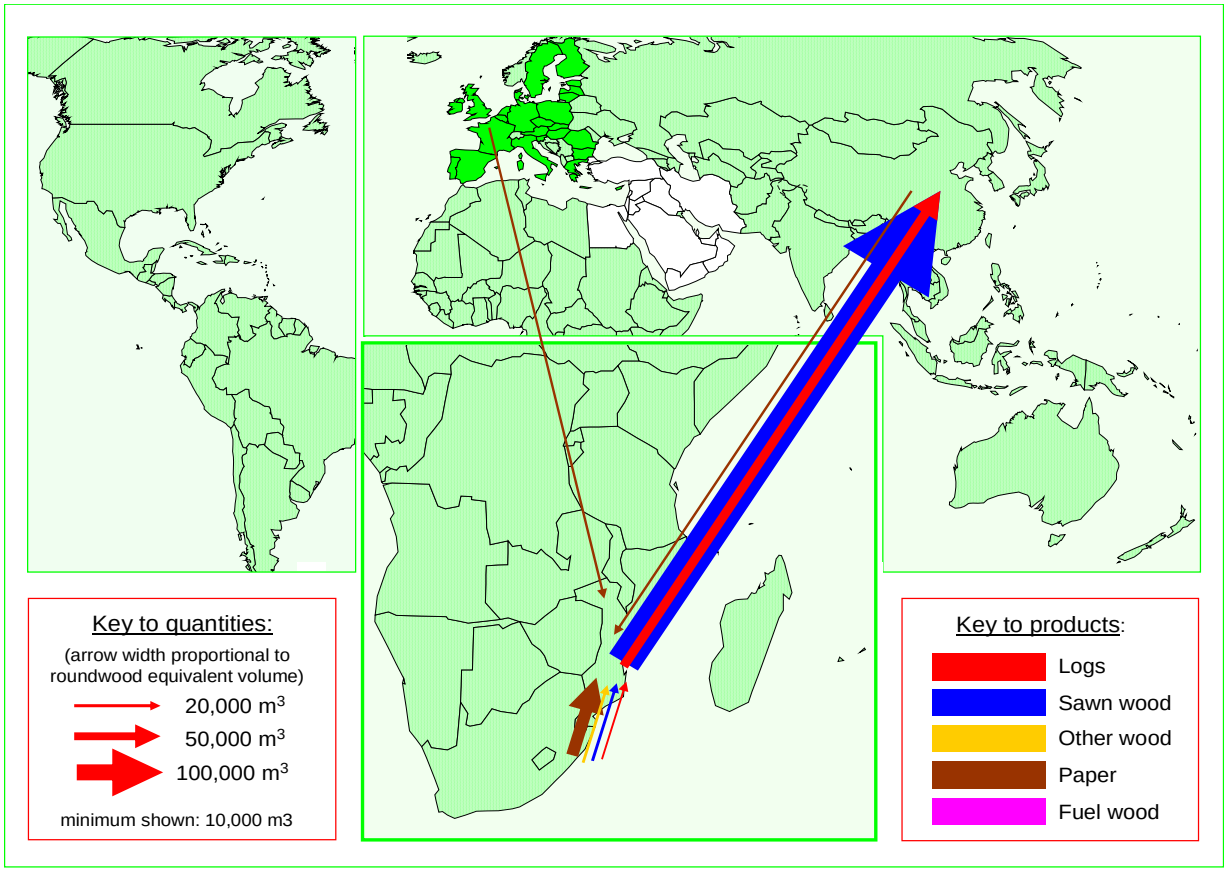


**Figure 27 Map showing Mozambique's trade in wood-based products (2011)/ Figure 27 Carte illustrant le commerce de produits dérivés du bois du Mozambique (2011)**

**Source: Based on data provided by Mozambique and presented in UN Comtrade, 2012**

The production forests in Mozambique are administered by the National Directorate of Lands and Forests (DNTF), of the Ministry of Agriculture. Forests in National Parks and Game Reserves are under the authority of the Ministry of Tourism, with protection and law enforcement the responsibility of the recently created National Directorate for Conservation Areas (DNAC).

The Forest Policy is from 1998. The Forest and Wildlife Law from 1999 establishes two regimes for the exploitation of forests: i) simple (annual) licences for a maximum of 500 $m^3$ exclusively for Mozambicans, who can demonstrate they have the necessary equipment and that they have the approval of the local community; and ii) concessions, for up to 50 years, requiring an inventory and approved management plan and processing industry, as well as local community approval. These are open to international investors.

The system of licences, permits and taxes which governs the production, transport and export of timber in Mozambique is perfectly adequate to ensure timber legality, but is not well enforced. Several agencies are involved in the supervision of the export of timber from Mozambique, including the Department of Industry and Commerce, Provincial Forestry and Wildlife Service (SPFFB) of the Department of Agriculture, Customs, the police and the port authorities. What is missing is the political will to enforce the Laws

The forest sector is not transparent, in the sense that key data related to forestry is not freely accessible to stakeholders and the general public. No data on inventory, quotas, licensing, production, processing, industrial output and employment or export is publically available.

Currently, there are three FSC-certified forest operations in Mozambique: one FSC-certified natural forest, LevasFlor Ltd in Sofala Province, exporting parquet to Europe, one plantation, the Niassa Green Resources plantation, and one controlled wood certificate for blackwood (*pau preto,* Dalbergia melanoxylon).

Mozambique is heavily reliant on wood-based fuels for domestic cooking, with charcoal dominating in urban areas. A study in 2007 estimated national charcoal production at 5 million sacks/year or165, 000 $m^3$. The total value of this production is in excess of USD 50 million per year. The preferred species for charcoal are the valuable dark heavy hardwood species, particularly *chacate* and *mondzo*, but acacias are also used.

Both concessionaires and simple licensed loggers have to apply for timber harvesting licenses each year. Government policy is to promote concessions over simple licenses, and the number of fully approved concessions had reached over 100 in 2011. However, the number of simple operators remains high, at over 450. Actual harvesting levels have been difficult to assess.

Although there is little information on Mozambique's forest industry, the domestic timber demand contributes to a significant portion of the forestry activity and is growing rapidly with local production not satisfying the demand. This segment of the market is being partially satisfied by imported pine.

Total forest cover in Mozambique continues to decline, primarily because of shifting cultivation and charcoal production, while the area of plantations is set to increase dramatically.

Logging in Mozambique continues to increase, because of escalating demand from China and more recently, India. At the same time, transparency in the sector is declining, so it is increasingly difficult to understand exactly what is happening. Particularly the export of a small number of heavy hardwood timber species to China continues to drive logging. Although illegal logging and its economic consequences have been subject to public outcry for nearly a decade, forest governance has not improved.

Illegal logging is threatening the future of the forestry sector. Something needs to be done in Mozambique. Support for independent forest monitoring in the forestry provinces might be a powerful measure against illegal logging, but is not likely to receive political backing. Similarly, a strong signal from international donors that corruption in and mismanagement of the forestry sector is unacceptable, and additional support to civil society for advocacy, may also have an impact. As a first step in transparency, funding could

be provided to the enable the establishment a forest governance website, where all the basic data and maps on operators, concessions, licensing, exploitation, industry and export could be posted.

## Annex 11 Summary of the Rwanda Country Report

Rwanda has a total area of 2.6 million ha, and an estimated population of approximately 10.6 million people.

The forest cover of Rwanda is around 500 000 ha, which corresponds to 20% of the land area, distributed as 125,000 ha of mountain forest, 25,000 ha of indigenous woodlands and 350,000 ha of forest plantations. All indigenous forests of the country are protected areas (gazetted as national parks or reserves) and are not used for wood production. The bulk of forest resources that can be harvested are the plantations, consisting mainly of eucalyptus but also *Grevillea robusta* and pines. For all forest resources, protection of watersheds is an important function.

One remarkable characteristic of forest governance in Rwanda is that indigenous forests and protected areas are effectively protected, making Rwanda one of few countries in Africa where deforestation is under control. On the other hand, scarcity of land available for forestry is major constraint for expansion.

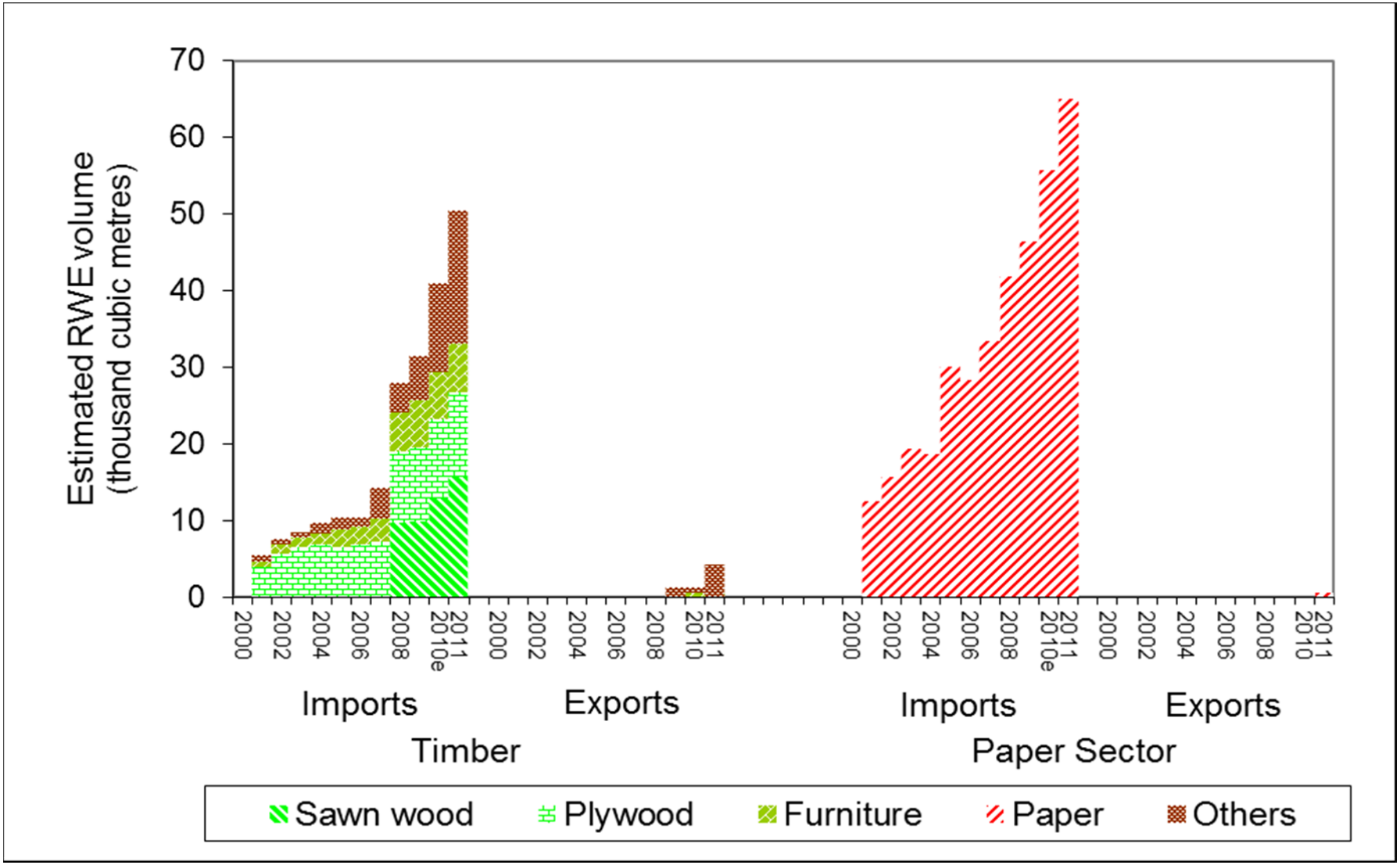


**Figure 28 Rwanda's trade in wood-based products (2000-2011)/ Figure 28 Le commerce de produits dérivés du bois au Rwanda (2000-2011)**

**Source: Based on data provided by Rwanda and presented in UN Comtrade, 2012**

As can be seen from the above figure, Rwanda exports very small amounts of wood products, most of them processed or at least semi-processed. Imports of both sawn wood and particularly paper are on the increase. The procedures of exporting wood-based products are not different from the procedures for other products, i.e. there are no specific provisions in the forest law but in the national laws that regulate imports and exports. Still, to export timber legally from Rwanda, which currently rarely takes place, an export permit issued by the forest administration in Kigali is necessary. A transport permit is required to transport imported wood from the border to Kigali or any other market in Rwanda.

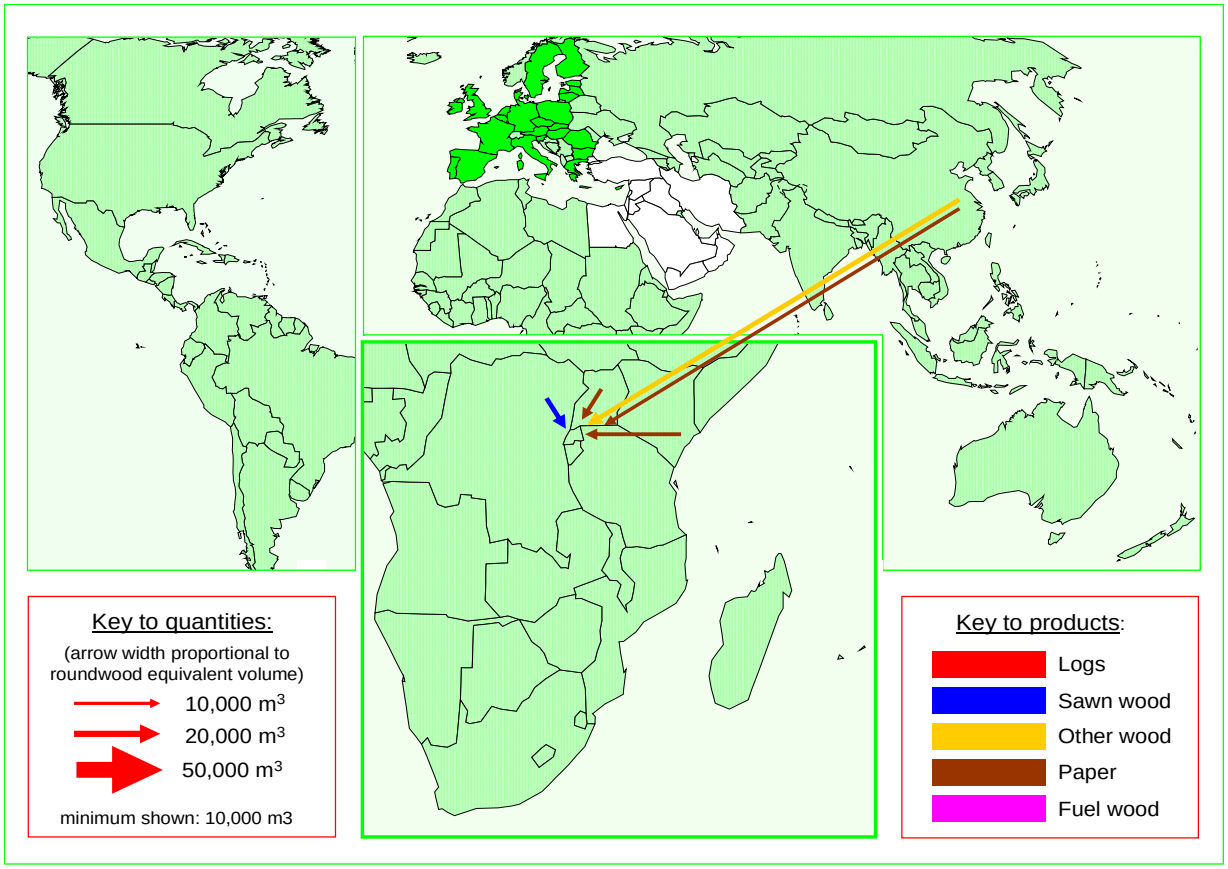


**Figure 29 Map showing Rwanda's trade in wood-based products (2011)/ Figure 29 Carte illustrant le commerce de produits dérivés du bois du Rwanda (2011)**

**Source: Based on data provided by Rwanda and presented in UN Comtrade, 2012**

The Department of Forestry and Nature Conservation is one of four departments under the Rwanda Natural Resources Authority, established in 2008 and created out of a former Ministry of Forests and Mines. The new department is not well staffed and only few professionals have been trained in forestry. Forests gazetted as national parks are managed by the Department of Tourism and Conservation, under the Rwanda Development Board.

A new Forestry Policy was published in 2010. This forest policy has received an international award, the Future Policy Award by the World Future Council, seeing it as a most exemplary national policy being able to create better living conditions for current and future generations by producing practical and tangible results. In contrast to the new forest policy, the regulation of forests and woodlands in Rwanda is still organized by the old Forest Law from 1988, which is no longer consistent with more recent political and administrative reforms. A revised forest law is therefore under preparation. One policy document on forestry much cited by decision-makers is the "Vision 2020" which presents the framework of a long-term development policy for Rwanda and recognizes that

the development of the forestry sector is a national priority. In that context, the Government sets the target that the national forest areas should reach at 30%, up from the present 20%.

There is a ban on the use of fuelwood for making bricks and tiles and a ban on the use of poles for scaffolding.

The regulatory framework for the forestry sector is quite transparent particularly in comparison to other countries of the region. In general, the rules are clear and published. Forest law enforcement is very strict. Pit sawing of hardwood timber species was stopped about 10 years ago. Illegal activities are minor and entail many collection of fuelwood.

There are no certified forestry operations in Rwanda.

Firewood and charcoal together represent more than 98% of cooking energy consumption. The national consumption for these products is estimated to be equivalent to about 4.6 million $m^3$ RWE per year. It is generally believed that the current consumption of firewood and charcoal, even when including the large amounts of wood coming from scattered trees, exceeds the sustainable supply. Similar conclusions have been drawn regarding the consumption of sawn wood.

There are currently no industrial scale processing operations in the country. Like for timber harvesting and extraction, most of the downstream processing of the wood in Rwanda is done in an informal way and either manually or in small-scale units. Some producers in Kigali make wooden furniture and have well developed workshops.

The main characteristics of the trade in wood-based products are that exports are particularly small (about 5000 $m^3$RWE in 2011) and imports are not very big (about 120,000 $m^3$ RWE in 2011), but both are steadily increasing.

Exports from Rwanda to EU-27 of wood-based products are nil. The national demand of sawn wood is mainly met by softwood produced in plantations in Rwanda, the main species being *Grevillea robusta*, and various coniferous timber especially pine. Hardly any softwood from plantations is imported as there is no surplus of these products within reach in any of the neighbouring countries. Rwanda does not produce hardwood so about 10% of the national consumption of sawn wood consists of hardwood imported from D.R. Congo (LTS, 2010c). The rest of the imports of wood-based products by Rwanda are processed or semi-processed (paper, panels in particular), as the country currently does not have a wood processing industry.

Illegal logging is not a serious issue within Rwanda.

Forest governance in Rwanda should be considered in a wider context of what is going on in D.R. Congo. The current period is a kind of transition time for forest governance in Rwanda as the new forest law, the details of which are not known, is being finalized. When it is enacted, and when the new institutions like the Department of Forest and Nature Conservation are fully staffed, it will hopefully bring some change to the sustainable management of forest resources. By that time it will be easier to see what needs to be done to enhance forest governance.

## Annex 12 Summary of the South Africa Country Report

South Africa, with a population of 50 million people, is forested to about 8%.

Forestry in South Africa is very different from that in the other countries in this study in almost every respect. The sector suffers few of the governance and illegal logging problems currently besetting other countries. The forest sector is highly developed, industrialised and sophisticated.

Reforestation with exotic *Eucalyptus* and *Pinus* species began in South Africa in the mid-19$^{th}$ century to provide sawn timber and fuelwood for the railways, and the country is now famous for its plantation forestry, which is amongst the most productive in the world. Plantation forestry has high levels of FSC certification. The area under tree plantations covers about 1,27 million ha.

The commercial production of native hardwoods from indigenous forests, which is the focus of illegal activities in other countries in this study, is very limited and currently well-controlled, with the management objective having a focus on conservation. These indigenous forests cover around 500,000 ha, situated along the southern and south-eastern coasts. A key characteristic of these indigenous forests is their extreme fragmentation.

The man-made plantations of exotic tree species, such as pine, eucalyptus and wattle, are covering an area of 1, 275 million ha. The total output from these areas in 2008/09 was close to 19 million m3, with most of the wood going to for the manufacture of pulp and paper, followed by sawn timber. The important saw milling sector consumes about one third of that. Today, an area of around 80,000 ha is clear cut every year, and replanted. Although the area under plantations no longer is expanding, the yields per ha have increased significantly by replanting harvested areas with clonal and high producing seedlings.

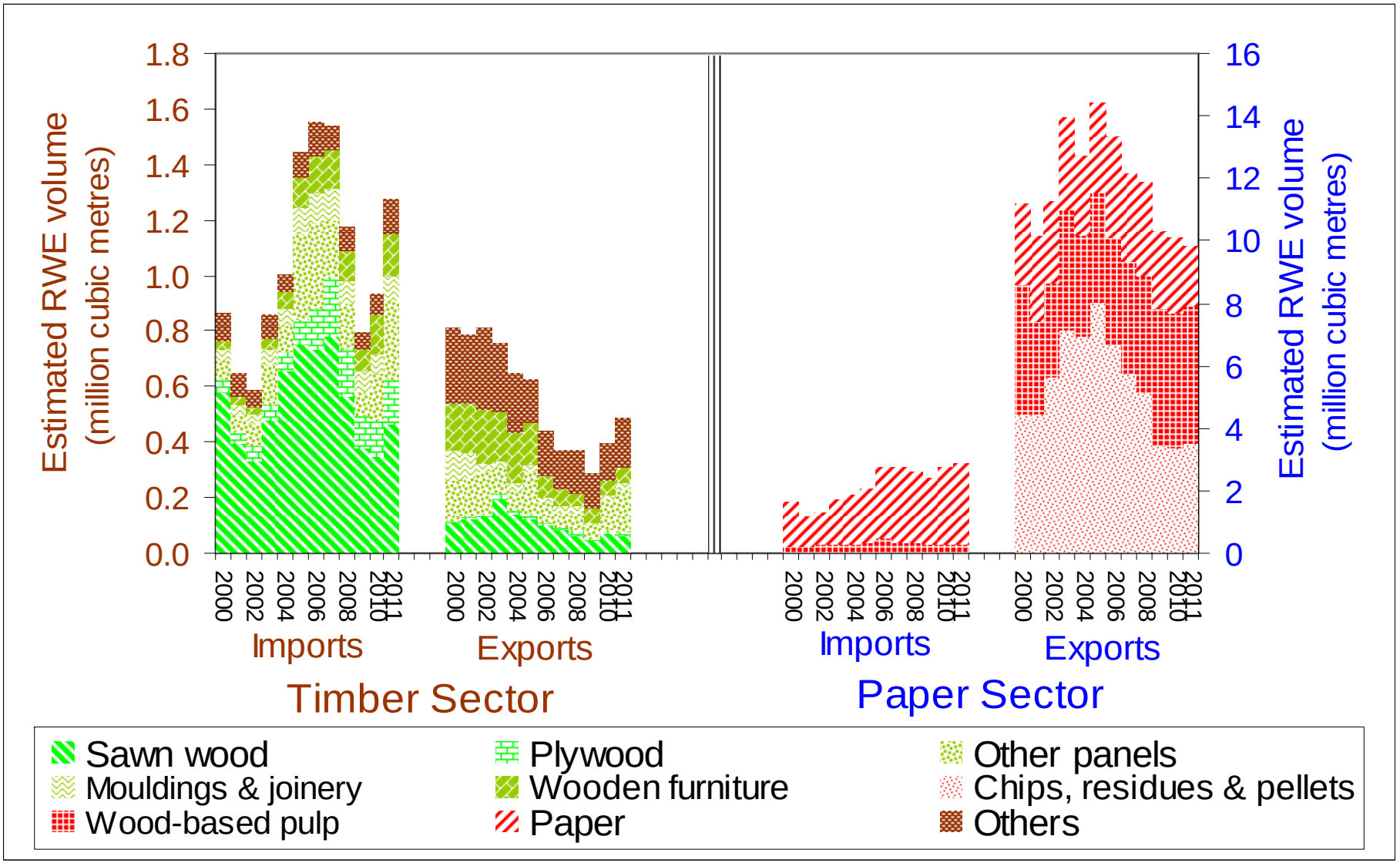


**Figure 30 Trends in South Africa's trade in wood-based products (2000-2011)/ Figure 30 Tendances du commerce en produits dérivés du bois en Afrique du Sud (2000-2011)**

**Source: Based on data provided by South Africa and presented in UN Comtrade, 2012**

Wood chips, pulp and paper account for the great majority of South Africa's exports of wood-based products, as the above figure indicates. A small number of exporters and mills accounts for almost all exports.

South Africa exports wood chips to Japan, but in recent years this has declined from 5 million tons annually to around 3 million tons. Main reasons are a decrease in demand from Japan and secondly Mondi has diverted chips from their SilvaCel chipping export business to their paper mill in Richards Bay. At the same time, a new chipping plant is under construction in Mozambique, with support from the Japanese trading house Sojitz.

Paper exports are also tending to decline, but South Africa's exports of pulp, particularly chemical cellulose or "dissolving pulp" are increasing. Europe and Indonesia are the main markets for this product. Included in South Africa's export statistics is most of the production from the only pulp mill in Swaziland. South Africa also imports timber from Swaziland.

South Africa exports a substantial quantity of charcoal, almost all to the EU. The EU used to account for most of South Africa's exports of wooden furniture, but these exports declined to almost zero during the middle of last decade. South Africa's exports to the EU of sawn wood, veneer, panels other than plywood, doors and pulp have also reduced considerably since that time.

Paper, of higher quality grades than what South Africa does not produce domestically, comprises most of the wood-based products which South Africa imports, in terms of both RWE volume and trade value. The EU-27 tends to supply about half of that paper. Much of the remainder is supplied from China, Indonesia, South Korea and to some extent the USA.

Sawn wood accounts for most of the timber sector products which South Africa imports. This has averaged 361,000 m over the last decade. Each year since the middle of the last decade, Malaysia has supplied between a quarter and a half of this, and timber dealers state that meranti is the most important species. Prior to 2009, Zimbabwe supplied roughly a quarter South Africa's imports of sawn wood, and almost all of this will have derived from plantations. China supplies most of the plywood and wooden furniture that is imported into South Africa.

South Africa's forests are currently administered by the Directorate of Forestry and Natural Resources Management under the Department of Agriculture, Forestry and Fisheries (DAFF). The main role of DAFF in commercial plantation forestry is setting policy and regulation, but need to engage relatively little in compliance and law enforcement now that nearly 100% of private sector plantations are FSC certified. Their efforts focus more on the small growers that are not certified and the plantations that remain under their own management.

The Forest Policy for the sector has been established by the White Paper on Sustainable Forest Management of 1996. The National Forest Action Plan of 1997 (DWAF 1997) was developed in partnership with other government departments, the forestry industry, local communities and other stakeholders, and elaborated on a programme to implement the White Paper and resulted in two main pieces of legislation that were passed in 1998 to enact it - the National Forests Act and the National Veld and Forest Fire Act.

The system of licences which governs the production, transport and export of timber in South Africa is rather rudimentary and not well enforced, particularly outside the commercial forest estate, but it has been adequate to ensure basic timber legality, and the widespread certification of both plantations and indigenous forests by FSC provides an additional level of confidence in the legality of the operations. Several agencies are involved in the supervision of the export and import of timber and timber products from and into South Africa, including Customs, the Department of Trade and Industry, DAFF and the port/airport authorities. The Department of Trade and Industry licences businesses to engage in export of different merchandise.

FSC certification of plantations in South Africa began in 1997 and by 2003, the three major plantations owners Sappi (501,000 ha), Mondi and SAFCOL had certified their entire areas. As of September 2012, over 1.5 million hectares of plantations and natural forest are certified, under 21 certificates, including two group certificates and one indigenous forest. Overall, 82% of commercial timber plantations are certified, and the remaining 18% include state controlled plantations in the old homelands which are in poor condition. As the plantations and main indigenous forests are FSC certified, timber tracking is in place.

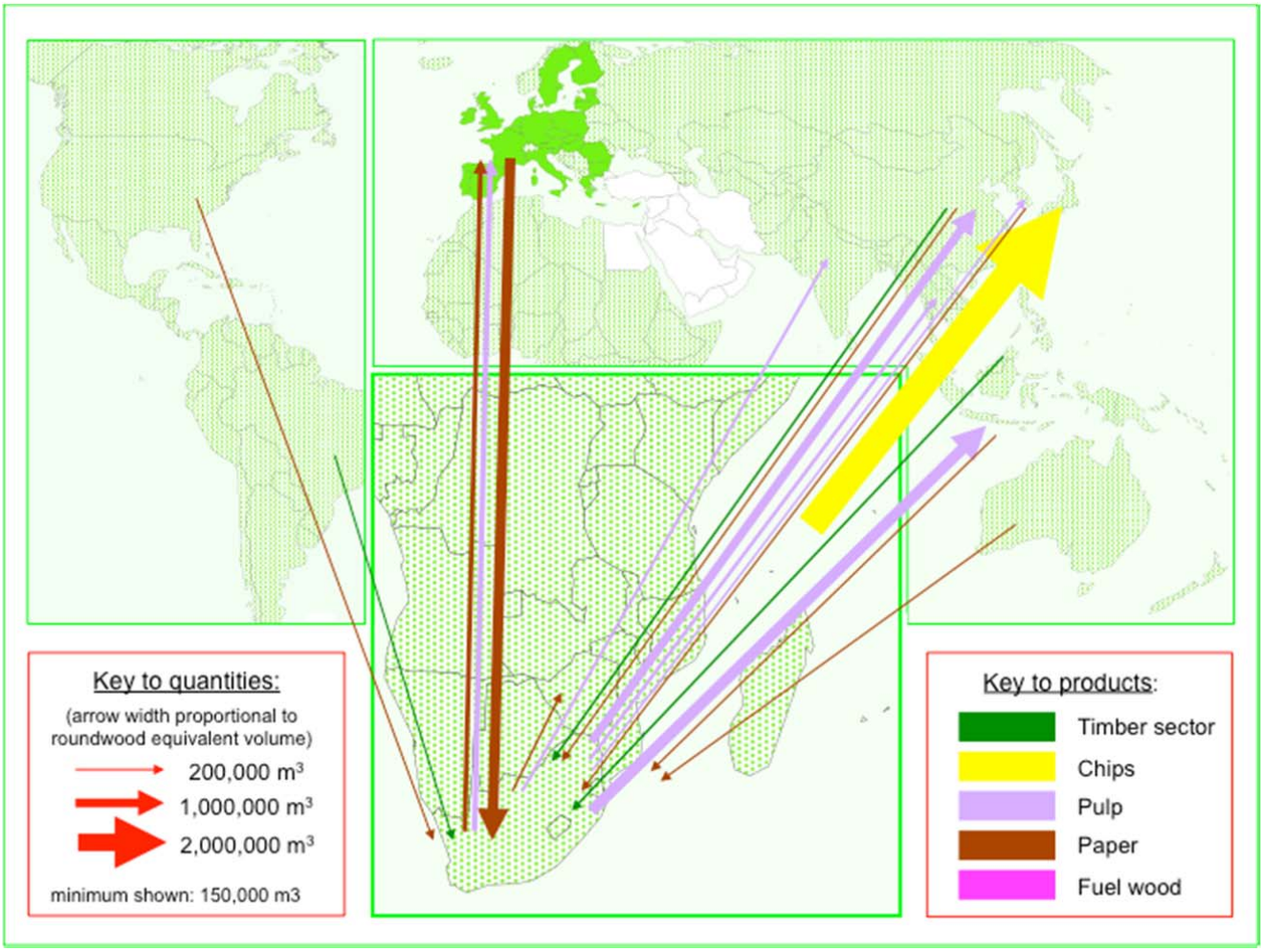


**Figure 31 Map showing South Africa's trade in wood-based products (2011)/ Figure 31 Carte illustrant le commerce de produits dérivés du bois de l'Afrique du Sud (2011)**

**Source: Based on data provided by South Africa and presented in UN Comtrade, 2012**

Fuelwood production and consumption is not a big issue in South Africa as its use and reliance is not uniform across geographical areas or within individual communities. With increasing modernity and household income, there is a gradual shift towards more modern fuels such as paraffin, gas and electricity. There is also increasing interest in converting woody biomass into pelleted fuels for electricity production.

While all 500,000 ha of indigenous forests being protected by law, only a relatively small proportion of the total estate, maybe not more than 5% of the total estate, is managed for timber production, and less than 7,000 m3 is produced annually, of all species.

South Africa has a well-developed forest industry sector. There are around 100 sawmills, 16 pulp, paper and board mills and some 50 pole plants. In addition, some wood is used by the mining industry. This industry uses almost 19 million m3 annually, with 4,8 million going to the sawmills and 12 million for the production of pulp and paper. With a plantation area that now is stable and unable to expand, the industry is in the same position, with the number of units also having remained at about the same number over the years.

Illegal logging is not currently an issue for most stakeholders in the forest sector, apart from the small scale theft of timber from commercial plantations and the smaller scale exploitation of indigenous forests and woodlands for subsistence by rural communities. While South Africa is clearly not a significant producer of illegal timber, it is very probably a consumer of illegal timber from other countries in the region – notably Zimbabwe, Zambia and Angola, and to a decreasing extent, Mozambique, due to limited control at the borders.

Forest governance in South Africa is amongst the best in the region. South Africa has the highest level of trade in wood-based products with Europe of the nine countries in this study and most of this is based on products from certified plantations. It is therefore very difficult to see how South Africa or Europe could benefit from a VPA (or the processes leading to one), and how South Africa could be considered a priority country for an expanded FLEGT programme. Furthermore, it is unlikely that a VPA with South Africa would help propel improvements in forest law enforcement and governance elsewhere, notably in the other countries which are the subject of this study. This is partly because most of the wood-based products imported into South Africa are consumed in South Africa or its neighbouring countries.

## Annex 13 Summary of the Tanzania Country Report

Tanzania, with a population of 35 million, has about 33 million ha of forests and woodlands, or almost 40% of the total land area of the mainland. About 13 million ha of the forests are gazetted as forest reserves including 85,000 ha of industrial plantations and 1,6 million ha of strategic forests that serve important water catchment functions. Mangrove forests cover some 115,000 ha.

There are 223 gazetted forest reserves, protective as well as productive, under the management of the central government while 168 forest reserves are under local governments. The latter reserves are a major source of income generation for the districts, covering 1.5 million ha.

Major species in the plantations include pines, cypress, eucalypts and teak. The Sao Hill Forest Plantation covers about 50% of the total planted area and dominates the wood supply in the country, currently supplying over 85% of the raw material consumed by the forest industries.

Forests on general land, covering 18.4 million ha, are outside of the protected areas. Most production of timber and fuelwood takes place in these forests which the rural population depend on for livelihoods and survival. The general lands forests are poorly managed and prone to constant pressures from conversion to other land uses especially agriculture, shifting cultivation and settlements.

There are also hundreds of smaller so called village land forest reserves, a most unique concept whereby villages and villagers now are managing their own forest resources, working through village forest management plans and village bylaw, in such a cost effective and sustainable manner that it has become an example to other countries when it comes to participatory forest management.

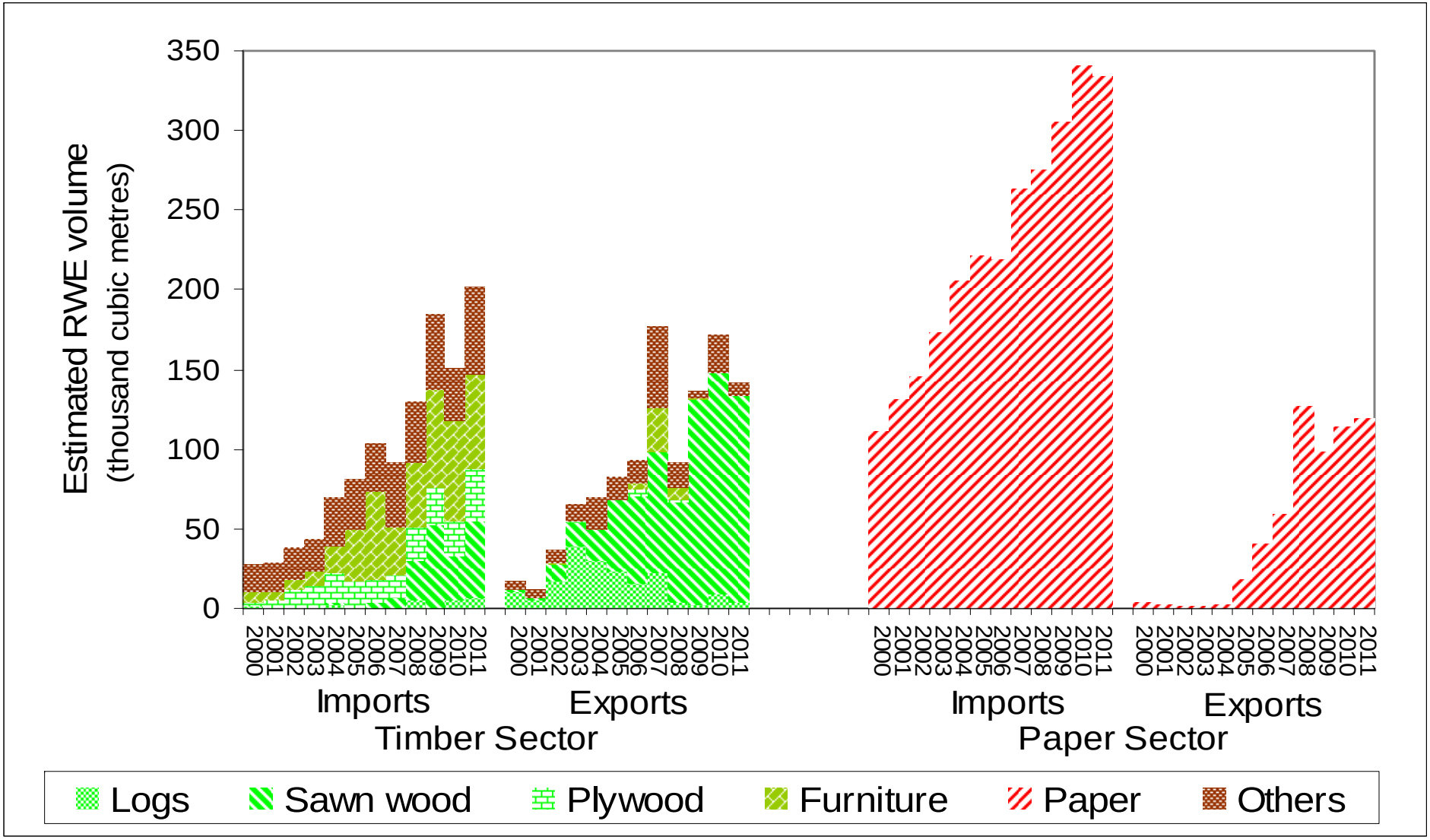


**Figure 32 Tanzania's trade in wood-based products (2000-2011)/ Figure 32 Le commerce de produits dérivés du bois en Tanzanie (2000-2011)**

**Source: Based on data provided by Tanzania and presented in UN Comtrade, 2012**

The above figure clearly shows that Tanzania's trade in wood based products is on the increase with current timber exports being at the level of 250,000m$^3$ annually. Export of sawn wood has increased while the export of logs has been replaced by this export of sawn wood. Kenya is a major importer of sawn timber from the plantations in Tanzania. Other export destinations include the EU, Japan and China. India has traditionally been the destination for most of Tanzania's exports of sawn wood, mostly teak. Much hardwood timber is being produced from the indigenous forests, by pit sawyers, and the illegal harvesting is a major issue in the utilization of the indigenous forests.

Tanzania's imports of timber primarily comprise sawn wood from Malawi and Mozambique and plywood, other panels and furniture from China. The bulk of sawn wood from Mozambique comes from indigenous forests, most of it illegally across the Ravama River, forming the southern border. South Africa and the EU account for most of the paper which Tanzania imports. EU does not import a substantial quantity of wood based products from Tanzania a round-wood equivalent volume smaller than 3,000 m3 each year.

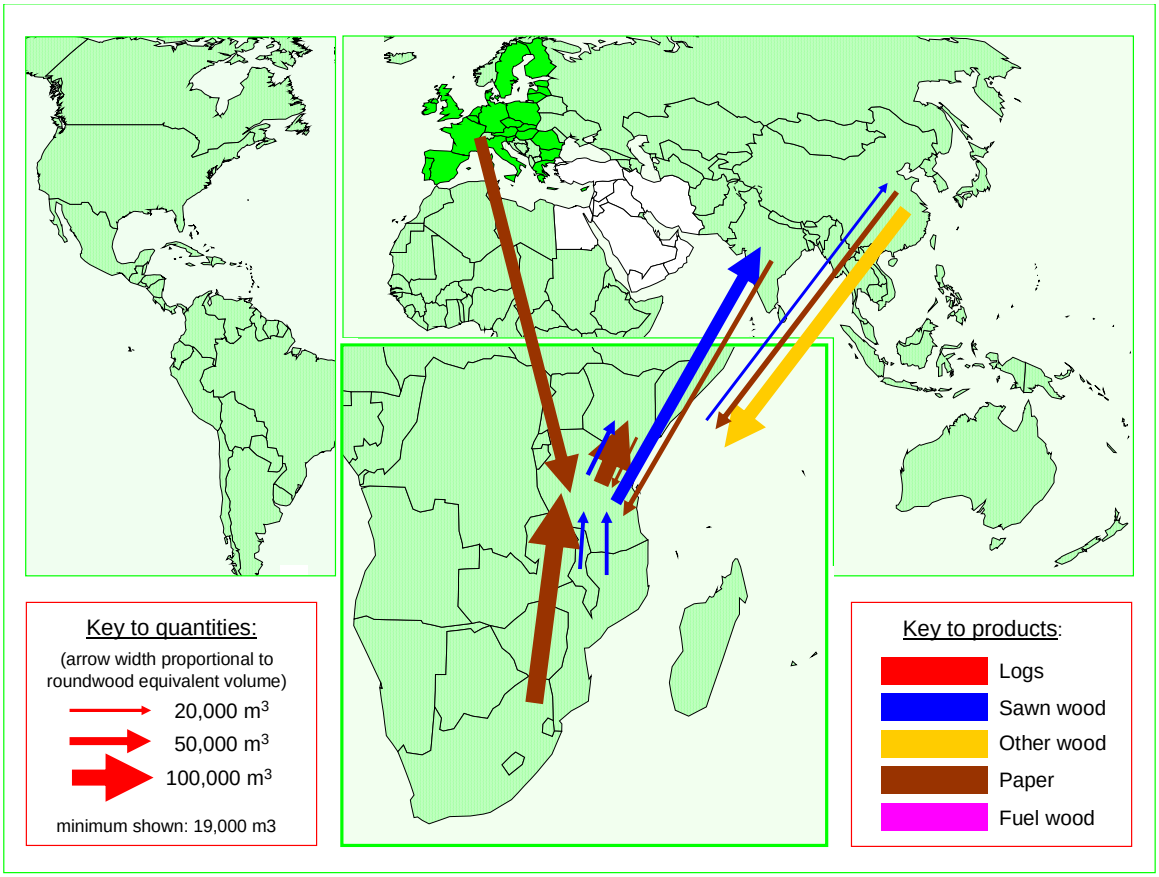


**Figure 33 Map showing Tanzania's trade in wood-based products (2011)/ Figure 33 Carte illustrant le commerce de produits dérivés du bois de la Tanzanie (2011)**

**Source: Based on data provided by Tanzania and presented in UN Comtrade, 2012**

Until 2011, the mandate for forest management and administration was under the Forest and Beekeeping Division, a line department in the Ministry of Natural Resources and Tourism. The Forest and Beekeeping Division was also responsible for technical training, research and deployment of staff to manage central government forests. In 2011 there was a sector reform which created a semi-autonomous agency, the Tanzania Forest Service with functions to manage central government forest reserves and forest resources in general land. The Forest and Beekeeping Division remains with responsibilities of policy development and legislation and the supervision of their implementation.

The current forest policy came into force in 1998. The policy was given legal force by the Forest Act of 2002 and was operationalized through the Forest Regulations of 2004, which vests the responsibility of managing forest resources

into various stakeholders. The policy emphasises participatory management and decentralization. These are radical changes from the earlier forest policy and legislation that focused on preservation and control under centralized management.

The Tanzania Forest Act of 2002 and the Forest Regulations (2004) provide the principal legislation for management of all forests in Tanzania. The Act is a comprehensive and enabling law that captures all the tenets of contemporary principles forest management.

A number of sections in the Forest Act 2002 apply to the harvesting and trade in forest products. It prohibits anyone from removing any forest produce within a national or local forest reserve without the necessary concession, license or permit. The procedures for applying for, screening, granting and revoking such permits are also specified by the Act. The Forest Regulations of 2004 outline procedures and conditions for the application, grant, variation, refusal, extension or cancellation of licenses, permits or concessions. The regulation of felling, removal and transportation of forest produce is also well covered.

To control the utilization of forest products and to ensuring that harvesting and transportation are done in accordance with regulations and procedures laid down in *Forest Act,* the FSU was established in 2005/2006. During patrols and at checkpoints, documents are examined for authenticity and logs inspected for hammer-marks. The FSU staff can stop ant truck on any road for inspection, they can mount temporary checkpoints, visit harvesting areas and stores for forest produce. Any forest produce that is non-compliant is impounded.

According to the Forest Act (2002) timber exporters are required to possess a valid export certificate issued by the Director for each shipment. Applications for the permission to export forest products are to be accompanied by a range of documents including a valid trading license, tax clearance certificates etc. Export certificates may only apply to graded timber whose origin and grade tallies with the timber markings. Timber inspection before export, including grading and marking, can only be conducted by those authorized by the Director. An authorized timber grader must conduct grading before the shipment is made. It should be noted that export of logs of any tree species is prohibited by law.

Forest certification in Tanzania is confined mainly to a handful of commercial forest plantations in the southern highlands of the country. One estate of around 30,000 ha is certified, some have stopped and some others are interested.

Prior to commencement the privatization policy in the 1990s, the forest industry in Tanzania was dominated and owned by the government through Tanzania Wood Industry Corporation, TWICO. Activities the revolved around mechanical wood processing through sawmilling, furniture making and joinery but also other forest-based industries including small-scale paper and board production, match making, poles production, chipboard, fibreboard and blockboard manufacturing and tannin extraction. Industrial wood consumption stood at an average 750,000 $m^3$ a year.

Currently, the wood-based industry in Tanzania is dominated by sawmilling and furniture making. The number of registered sawmills is now almost 400, most of which are small-scale with an annual log input not exceeding 5,000 $m^3$ and employing about 5-8 persons. The total utilization capacity of these mills is, however, less than 50% of the theoretical capacity. The government plantations are supplying 80% of the industrial roundwood, most of them found at the Sao Hill forest plantation. One pulp and paper mill at Mufindi produces 40,000 ton of kraft paper annually, for domestic and international markets. There are several pole treatment plants producing good quality poles.

There are reportedly far reaching problems of corruption in Tanzania. Illegal activities take the form of logging without documentation, logging in unauthorized areas, under-declaration of volumes leading to undervaluation and the use of invalid export documentation. One result is a considerable shortfall in revenue collection.

Although the forestry sector of Tanzania has gone through a substantial sector reform which has given communities wide and unique responsibilities when it comes to forest management and protection as well as access to forestry products, the institutional capacity in law enforcement needs substantial strengthening in order to curb illegal harvesting and trade in forest products.

With Tanzania exporting only small quantities of wood based products to the EU there is limited scope for the EU to enter into VPA negotiations with Tanzania.

## Annex 14 Summary of the Uganda Country Report

Uganda, with a population of 35 million, has a forest cover of some 3,6 million ha, which is 18% of the land area. The indigenous forests include both tropical forests and woodlands. Tropical forests cover 924,000 ha while the area of tree plantations is around 33,500 ha. Tree planting by the private sector and local communities is being promoted in Uganda on both private and government lands as a means of reducing pressure on indigenous forests

Uganda has 506 gazetted forest reserves, covering 1,265,742 ha of protected areas, in the form of Central Forest Reserves managed by the National Forestry Authority or Local Forest Reserves managed by District Local Governments. Wildlife Conservation Areas are managed by the Uganda Wildlife Authority. Although Uganda is considered forest rich, a major problem faced is the rapid decline in forest cover. The annual rate of deforestation has averaged over 1.8% in recent years. Uncontrolled harvesting and encroachment for agriculture and human settlement are the main causes of deforestation and forest degradation.

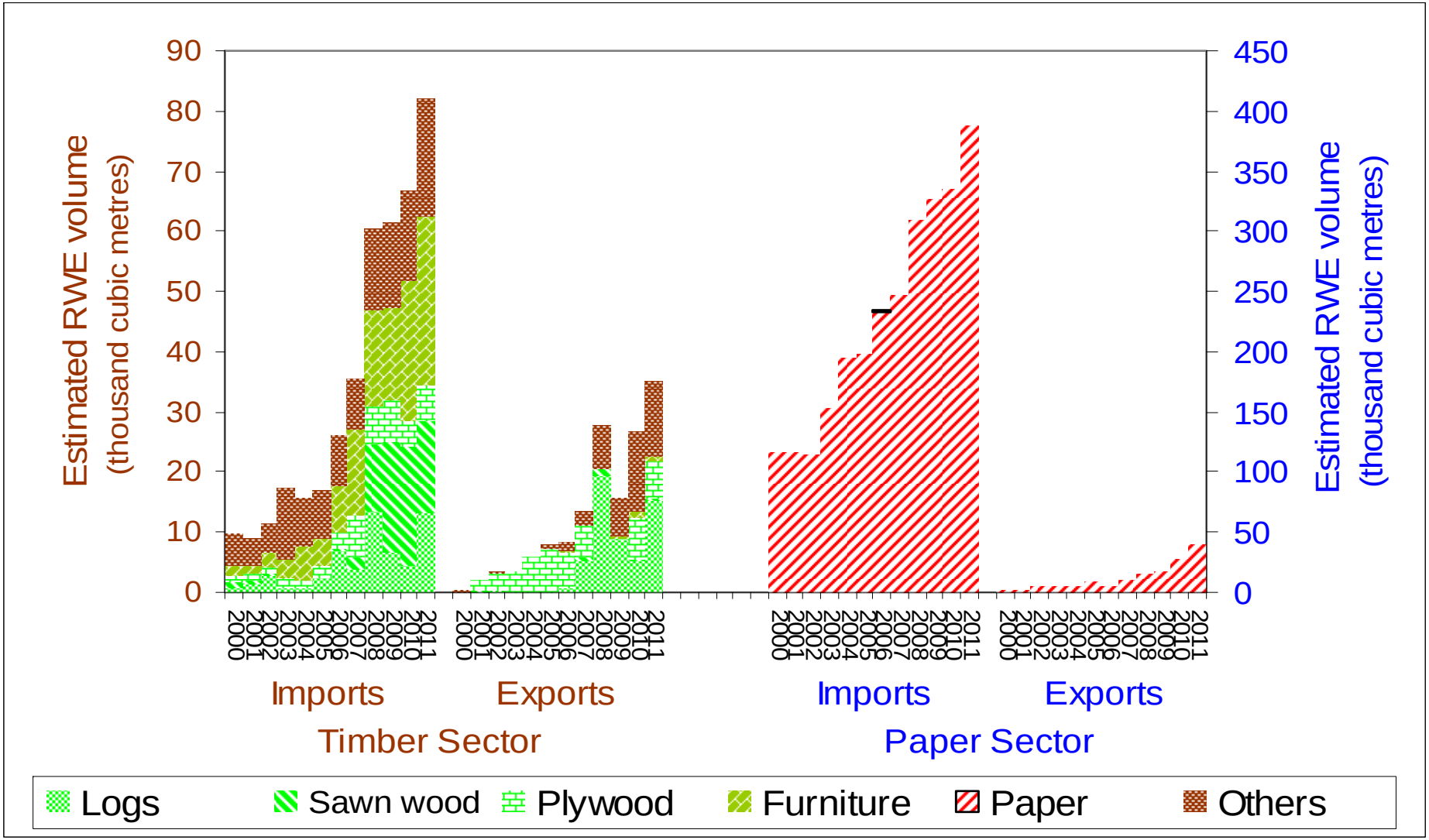


**Figure 34 Uganda's trade in wood-based products (2000-2011)/ Figure 34 Le commerce de produits dérivés du bois en Ouganda (2000-2011)**

**Source: Based on data provided by Uganda and presented in UN Comtrade, 2012**

As can be seen from the above figure, Uganda is a net importer of wood based products, and the gap between imports and exports is widening. Although the export of logs and sawn wood produced from trees grown in Uganda is prohibited, processed and semi processed products, mainly furniture and doors, are being exported. On the other hand, timber is imported from DRC, South Sudan and Tanzania. This is subject to the normal customs requirements and a fee of 1% of the value of the timber is paid.

Uganda has little trade in wood-based products and paper imports account for the bulk of that trade. Paper is supplied mainly from the European Union, India, Kenya, South Africa, and the United Arab Emirates. The country imports more timber products than it exports. Exports and imports have increased during recent years due to sustained growth in the construction sector. South Africa, DRC and China supply most of the timber and wood products imports. Most of the timber that is exported from Uganda comprises logs, plywood and other panels (destined predominantly for Kenya and Rwanda).

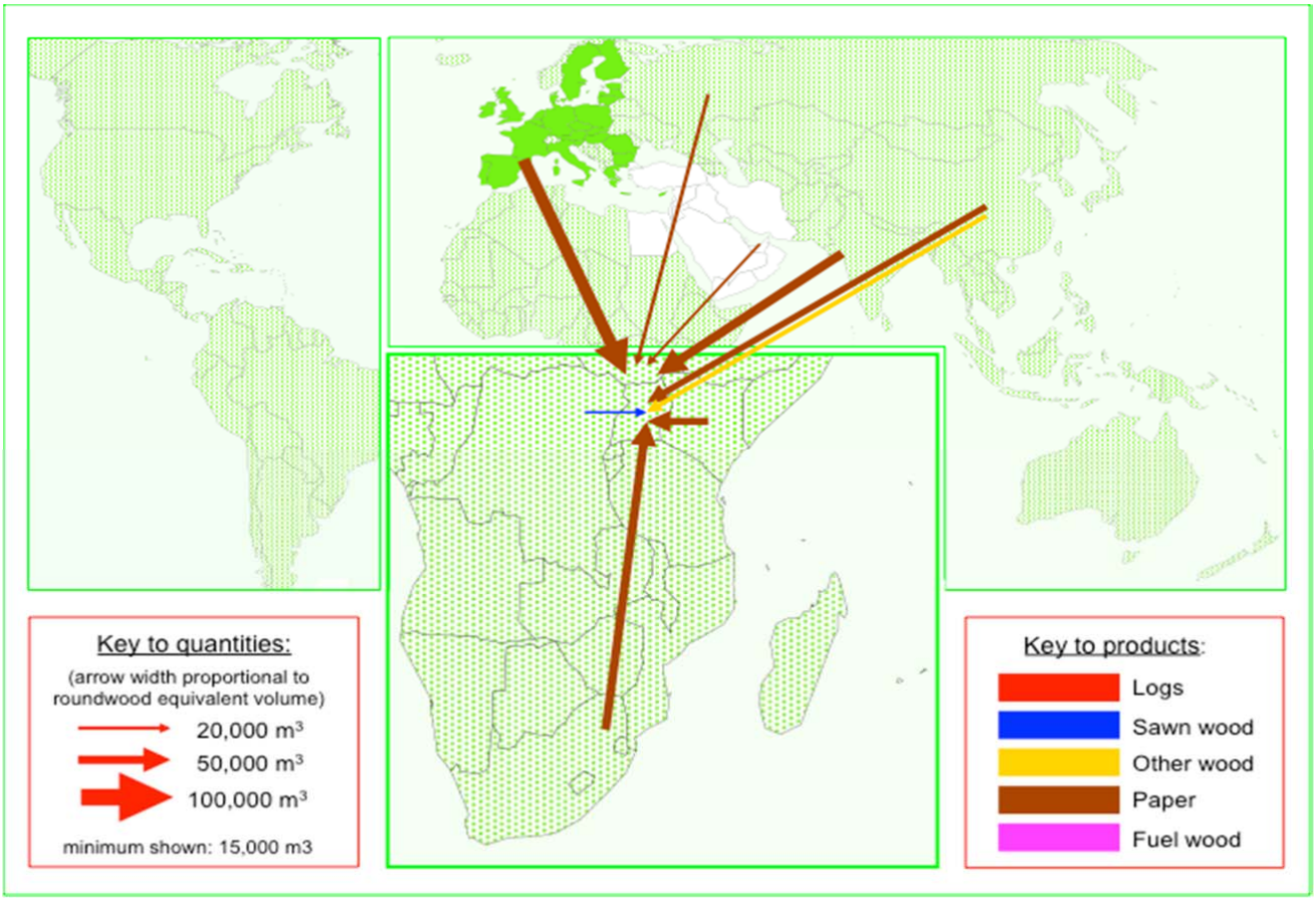


**Figure 35 Map showing Uganda's trade in wood-based products (2011)/ Figure 35 Carte illustrant le commerce de produits dérivés du bois d'Ouganda (2011)**

**Source: Based on data provided by Uganda and presented in UN Comtrade, 2012**

Illegal logging and trade in timber were at a high level in Uganda during the 1970s and 1980s. From 1995, the country implemented rigorous law enforcement activities that were largely successful. The top executive of the then Forest Department was at that time changed five times and six senior staff were interdicted for their involvement in illegal forest harvesting. This unleashed a spate of uncertainty and corruption that rolled back previous achievements. However, policy, legal and institutional reforms were carried out in the early 2000s and effective law enforcement was again restored and the country witnessed compliance that surpassed previous levels. Thereafter, however, corruption and negative political interference struck again. The "Law Enforcement Unit" was disbanded and currently being witnessed is unprecedented degradation of the forest resources due to all kinds of illegal

activities, including harvesting without any license. To cope with this rather disturbing situation, the so-called "Environment Protection Police Unit" was established in December 2011 to support, *inter alia*, forest law enforcement. This was followed by a ban on logging, ostensibly to re-organise the forestry industry. Both these measures have been of marginal effect as the political will to implement them still is lacking.

The foregoing situation has been exacerbated by pressures from District Local Governments for more licenses to generate revenue, which they retain to run local programmes. Quite often, local government officials allocate licenses to themselves to gain from not only doing the business but also from under-declaration of the timber produced and defaulting payment of dues.

The responsibility to manage Local Forest Reserves and oversee development of private and customary forests outside of protected areas, deliver extension service and expedite management of trees on farms is decentralised to District Local Governments. The National Forestry Authority (a semi-autonomous self-financing body and retains revenues from license fees, stumpage and royalty charges and consultancies) was established in 2003 to manage the 506 Central Forest Reserves. The National Forestry Authority also supports District Local Governments, private sector and activities that benefit "public good" through technical assistance, financial allocations and law enforcement.

Uganda has a new Forest Policy from 2001 and a National Forestry and Tree Planting Act from 2003, which has replaced the Forest Act of 1964. A National Forest Plan, initiated in 2000 and revised in 2010, has restructured governance of the sector to enable decentralization and attract private sector investments and stakeholder participation.

In general, Uganda is not short of good policies, plans, laws and systems. The main weakness is poor implementation. The main causes of this include political manipulations, poor funding and limited institutional and human capacity to patrol forests and markets. Negative political interference has had adverse effects on management of forests in Uganda over the last three decades. Usually this manifests in political pressure on forest managers to ignore Forest Management Plan prescriptions. The National Forestry Authority maintains a Law Enforcement Unit to control the movement of and trade in timber.

Most of Uganda's policies and laws relating to the management of forests are relative recent and contain much of the contemporary thinking on forestry, aiming at good governance and sustainable forest management. All these instruments are available on the internet. A database for legal and illegal timber was established in 1995 but seems to have been abandoned.

Uganda has only 2 FSC certified forests, the Kibale and Mt. Elgon National Parks, but only for $CO_2$ sequestration as no harvesting is allowed. None of the country's production forests are certified.

The forest industry of Uganda is largely artisanal, characterized by old equipment and low technology, being wholly owned by the private sector. Timber is produced through pit sawing, mobile sawmills and one stationary sawmill. Pit-sawyers provide the bulk of sawn wood. The sawmill industry comprises cheap mobile sawmills operated by low skill personnel, resulting in wasteful harvesting techniques, low recovery rates and low quality timber. There are five pole treating plants and one wood-based factory, manufacturing plywood, block-board and flush doors for the domestic market and export to S. Sudan, Eastern DRC, Rwanda, Burundi and N. Tanzania.

It was estimated that about 44 million $m^3$ RWE of fuelwood and 2 million $m^3$ RWE industrial round-wood were produced and consumed in Uganda during 2008. A steady increase in total wood consumption has taken place since, driven largely by a booming construction industry. Currently, timber production from the productive indigenous forests has declined significantly, with the annual allowable cut from the central forest reserves standing at only 50,000 m3. And the softwood plantations established in in the 1960s have all been harvested with little replanting.

Currently, timber production from indigenous forests has declined significantly and the older softwood plantations that were established in the 1960–70s have almost all been harvested while most of the new plantations are less than 10 years old. The timber market is still dominated by hardwood timbers from indigenous forests and woodlands, with pine and eucalypts being harvested from the few remaining mature trees in forest reserves. Pine and cypress are imported from Kenya, Tanzania and South Africa and Mahogany (*Entandrophragma* spp and *Khaya anthoceca*), Mvule (*Melicia excelsa*) and Nkalati (*Aningeria spp*) are imported from the DRC.

Unsustainable harvesting has led to qualitative forest degradation through creaming off valuable tree species, especially mahogany. The combined effect of deforestation and high consumption rates has resulted in an imbalance between domestic demand and supply of wood based products.

The Customs services in the East African Community are being modernised as part of a trade facilitation programme among the member countries which includes collaboration between the different customs services and the exchange of data. This process includes improvement of customs infrastructure, adoption of computerised systems and adoption of standards used internationally for the coding of commodities traded. This has greatly improved the quality of information being collected by customs authorities across the East African countries.

It is recommended that government of Uganda undertakes institutional reforms and learns from what has been achieved in Kenya and Tanzania.

As Uganda is exporting only small quantities of wood based products to the EU, there is limited scope for the EU to enter into VPA negotiations with Uganda.

## Annex 15 Summary of the Zambia Country Report

Zambia, with a population of around 15 million, has a substantial forest cover, being forested at about 67%. The miombo woodlands are extensive, although having suffered from extensive deforestation due to charcoal production and clearing for farming. Forest plantations were started in the early 1960s, consisting of pines and eucalyptus, to augment timber supplies from indigenous forests, particularly mining timber.

Although Zambia has the largest area of forest of the countries of this study (49 million hectares) the nature of the forest (and cost of transportation) is such that export-oriented logging – to destinations outside sub-Saharan Africa - is unlikely to be commercially viable, except in relation to some particularly valuable species.

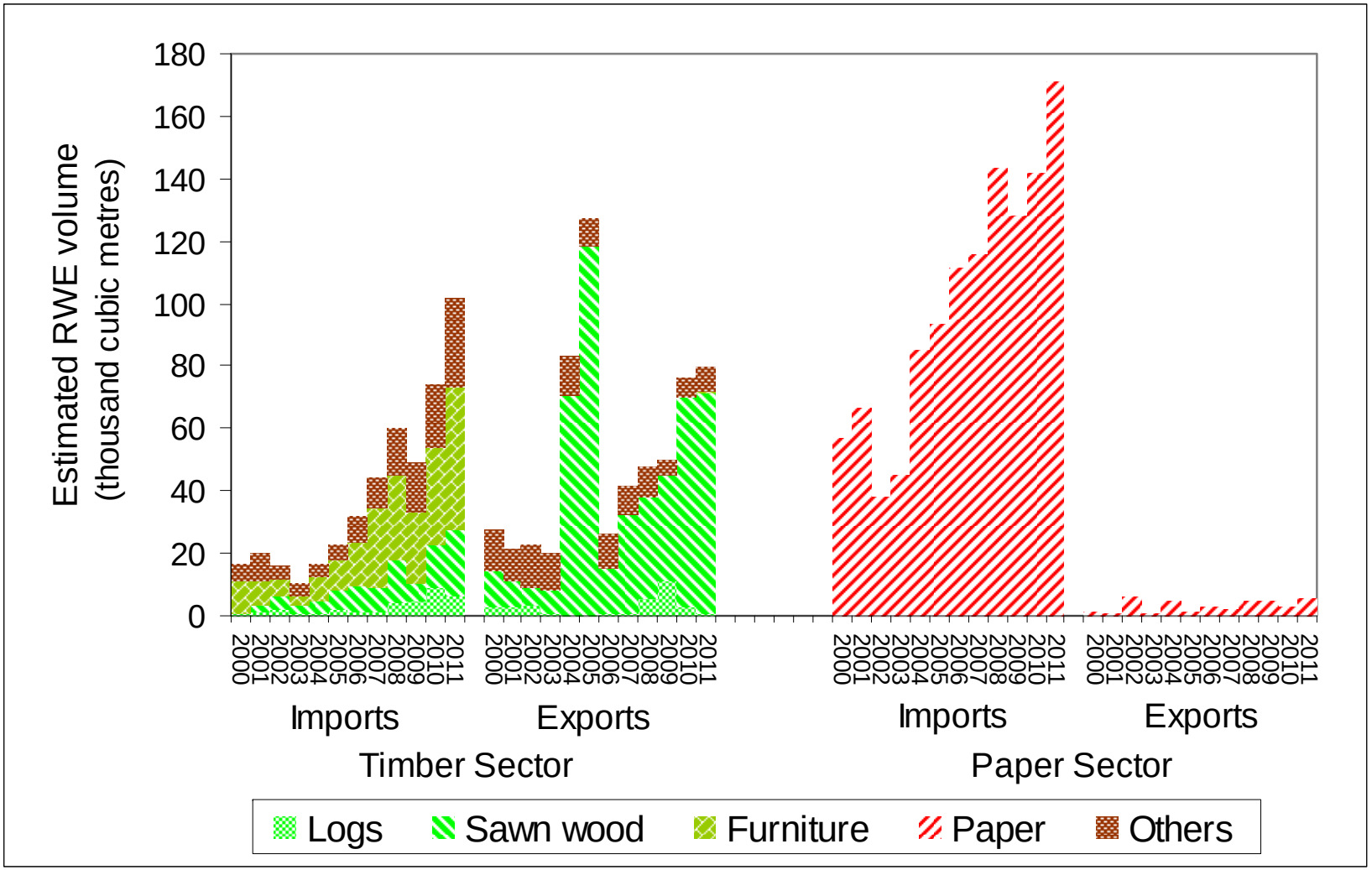


**Figure 36 Zambia's trade in wood-based products (2000-2011)/ Figure 36 Le commerce de produits dérivés du bois en Zambie (2000-2011)**

**Source: Based on data provided by Zambia and presented in UN Comtrade, 2012**

Zambia's imports of wood-based products are dominated by coniferous sawn timber from Malawi, and paper products from South Africa, both of which have increased dramatically in volume and value over the last decade. Wood-based furniture, mainly from China and South Africa and logs almost all in the form of treated coniferous wood, probably poles, from South Africa and Zimbabwe, are also important.

Democratic Republic of Congo and, to a lesser extent, South Africa and increasingly China are the destinations for most of the timber (predominantly sawn wood) that Zambia exports. Zambia's trade in timber sector products has, in terms of RWE volume, increased 4-5 fold over the last decade. Overall, imports have tended to exceed exports.

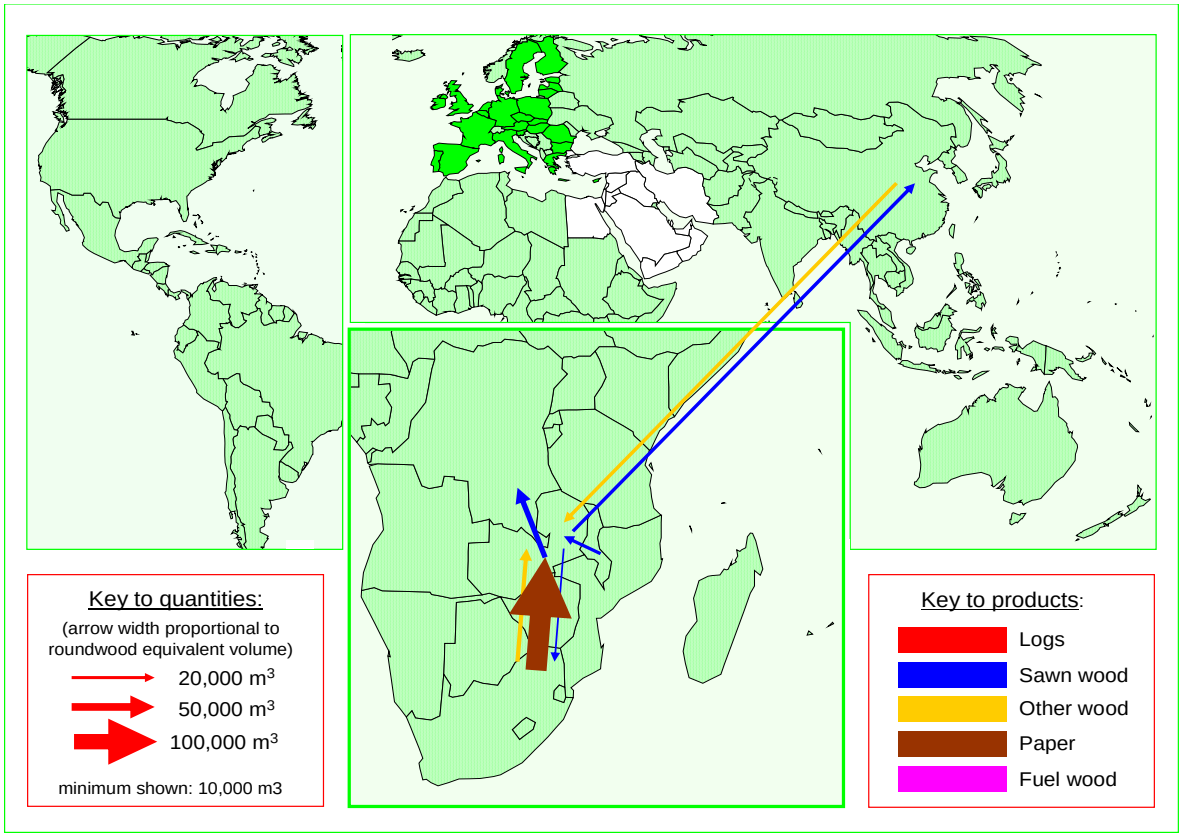


**Figure 37 Map showing Zambia's trade in wood-based products (2011)/ Figure 37 Carte illustrant le commerce de produits dérivés du bois de la Zambie (2011)**

**Source: Based on data provided by Zambia and presented in UN Comtrade, 2012**

An important issue regarding the legal framework is that, with donor support, a National Forestry Policy was adopted in 1998 and new Forests Act was drafted and actually passed in 1999 (Forests Act No.7 1999). This 1999 Act was set to transform the sector through the creation of an autonomous Zambia Forestry Commission to replace the Forestry Department and transfer management rights to participating communities. However, the required "commencement order" from the Minister has never been passed so the law is considered non-operational. This is despite considerable donor funding and technical assistance. After over a decade in limbo, a new Forest Act is now in the approval process, set to re-institute the old Forestry Department.

The Forestry Department, today under the Ministry of Lands, Natural Resources and Environmental Protection, is the government agency charged with administering the national forest estate. The statutory instrument currently governing the forest sector is the Forest Act of 1973. It vests the ownership of all trees and forest resources in the President, establishes the forest administration to administering the forest estate, establishes the status and governance of national and local forests and protected trees and sets out the main rules for the licensing, harvest and removal of major forest produce (timber and charcoal), and supervision by the forest administration.

The Forestry Department has received a lot of donor funding and assistance over the years, especially from Finland that has been providing support for over 30 years. Results have been disappointing with many basic problems identified 20 years ago still persisting today.

The system of licences, permits and taxes which govern the production, transport and export of timber in Zambia is adequate to ensure timber legality, but is not well-enforced. For instance, forest officers are supposed to be present in logging areas to mark trees for harvesting. However, the forest officers lack transport and can hardly go to the forest.

Transparency in the sector is much limited, as the Forest Department is the only government department that does not submit data to the Central Statistics Office,

The two forests in Zambia that were FSC certified in 1998 and 2003 have now been suspended because of problems with pit-sawyers having operated extensively in these forests, totally disrupting the intended management practises.

There are no recent and comprehensive studies of fuelwood production and use in Zambia. An increase in fuelwood consumption can be expected to follow the population increase and be linked to higher costs of kerosene and electricity. Charcoal is the preferred fuel for use in towns and is no doubt increasing with urbanisation. For charcoal production, a permit is required from the District Forestry Office in the area of production upon payment of a production licence fee. Little firewood is traded outside districts.

The export of timber is controlled under the Timber Export Regulations of 1997. The regulations state that the only forest products that may be exported are sawn timber, railway sleepers, poles from planted species, finished timber products and plantation trees. They further explicitly ban the export of charcoal, un-finished timber products from indigenous forests and sawn logs of any species. Roughly sawn timber cannot be exported.

Data available on forest utilization has been found to be incomplete, with figures missing for many years and no clear distinction between indigenous timber and plantation timber. Comparing figures for actual production with harvesting licenses revealed large gaps etc. FAO has estimated a production figure of 500,000 m3/ year, which is much higher than locally available figures.

Processing of forest products is done by sawmills, wood based panel manufacturing, pole treatment and carpentry. There are over 100 operators of bush type of small scale sawmills and about 10 medium to large sawmills operating in Zambia. Most of the small scale sawmills use plantation roundwood, except pitsawyers who process mainly hardwood. The bushmills use simple and light mobile equipment designed for smaller sized logs.

Forest degradation is ongoing and continuing in Zambia, the exploitation of valuable hardwoods is on the increase and forest governance continues to be weak. There is an absence of forest management planning at all levels and participatory forest management is not supported by legislation. Most forests are managed either without any management plans or under out-dated plans. The intention of reforming the forest sector through the proposed 1999 Forest Act has failed, making the Forest Department to continue operating under the outdated 1973 policy and legal frameworks.

The key problem of forest governance need to be addressed seriously and head on, politically and not just masked by some technical interventions. At the same time, the sustainability issue requires urgent attention, through management planning and policy revisions.

With Zambia exporting negligible quantities of wood based products to the EU, there is very limited scope for the EU to enter into VPA negotiations with Zambia.

## Annex 16 Overview of Botswana's Trade in Wood Based Products

This annex has been included to provide a baseline for the timber trade flow within, from and to Botswana. The information presented below is largely based on data from UN Comtrade. No field work took place in Botswana.

Botswana exports negligible quantities of wood-based products. This export consists almost entirely of paper, which it is likely to be repackaged imports from South Africa rather than to have been manufactured in Botswana. These imports are in turn supplied almost entirely from South Africa (and likely to be FSC-certified) and, to a lesser extent, from long-established by few large-scale producers in Zimbabwe.

There has been little change over the years in the physical quantities which Botswana imports, except for plywood and sawn wood in that Botswana's imports of these have tended to increase since the middle of last decade.

Figure 38 below shows that Botswana's import of timber sector products is high, with the export having been almost zero. The importation of paper has remained at a steady level.

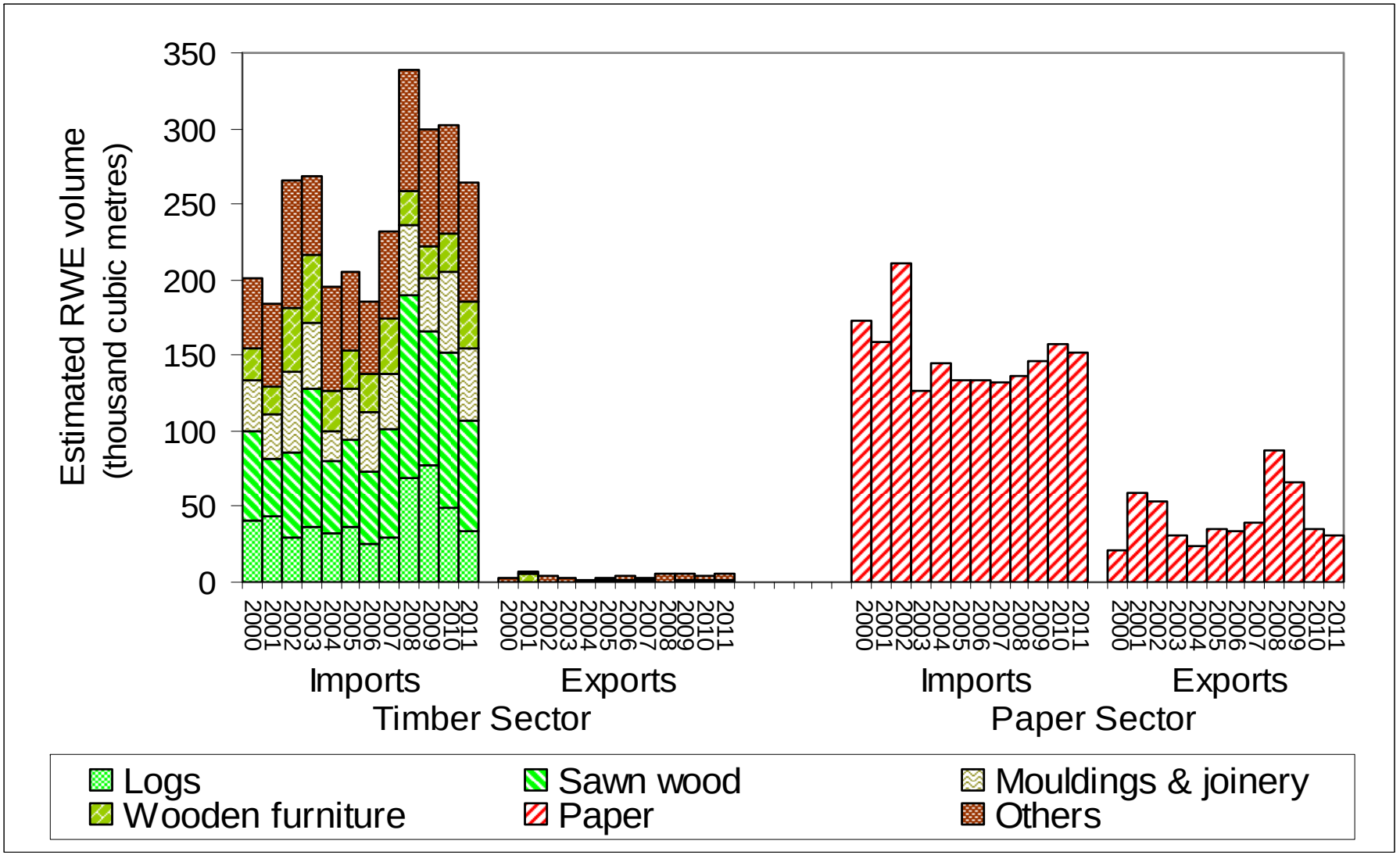


**Figure 38 Botswana's trade in wood-based products 2000-2011, by Product/ Figure 38 Le commerce de produits dérivés du bois 2000-2011 au Botswana, par produit**

**Source: Based on data provided by Botswana and presented in UN Comtrade, 2012**

The figure below, figure 39, shows the trade flows of wood based products to and from Botswana in the year 2011. Botswana is clearly a net importer and trades mainly with the neighbouring countries.

From the next figure, figure 40, can be seen that the import of wood-based products has evened out in recent years at around 450,000 m3 RWE annually.

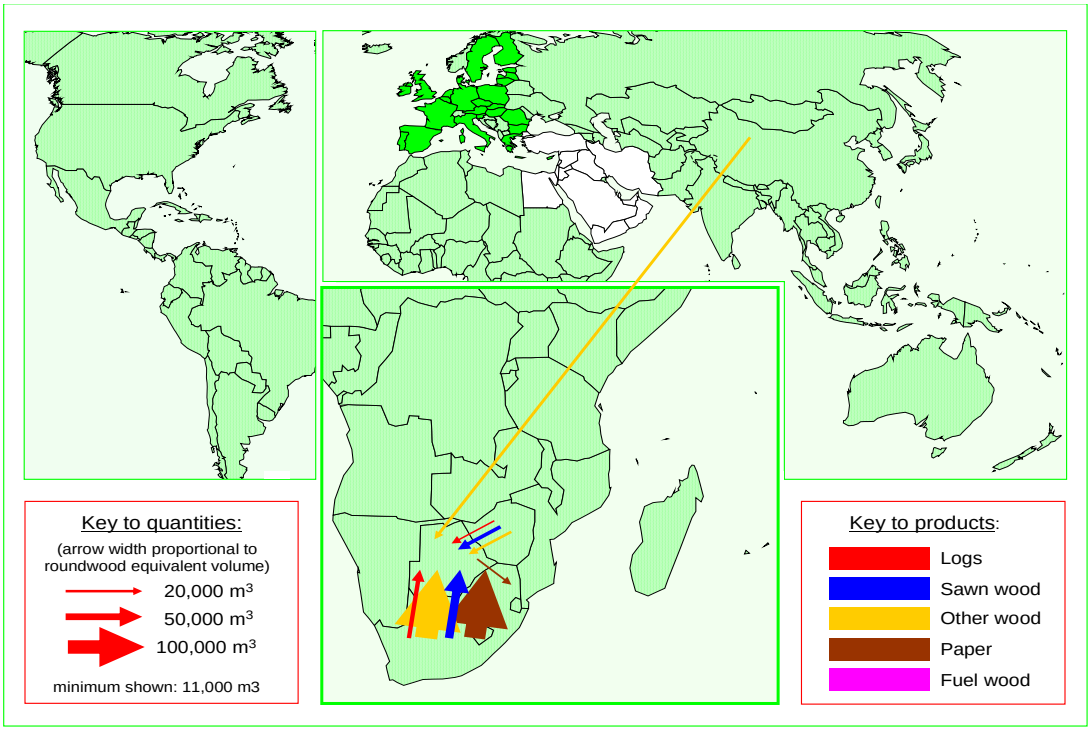


**Figure 39 Map showing Botswana's trade in wood-based products (2011)/ Figure 39 Carte illustrant le commerce de produits dérivés du bois du Botswana (2011)**

**Source: Based on data provided by Botswana and presented in UN Comtrade, 2012**

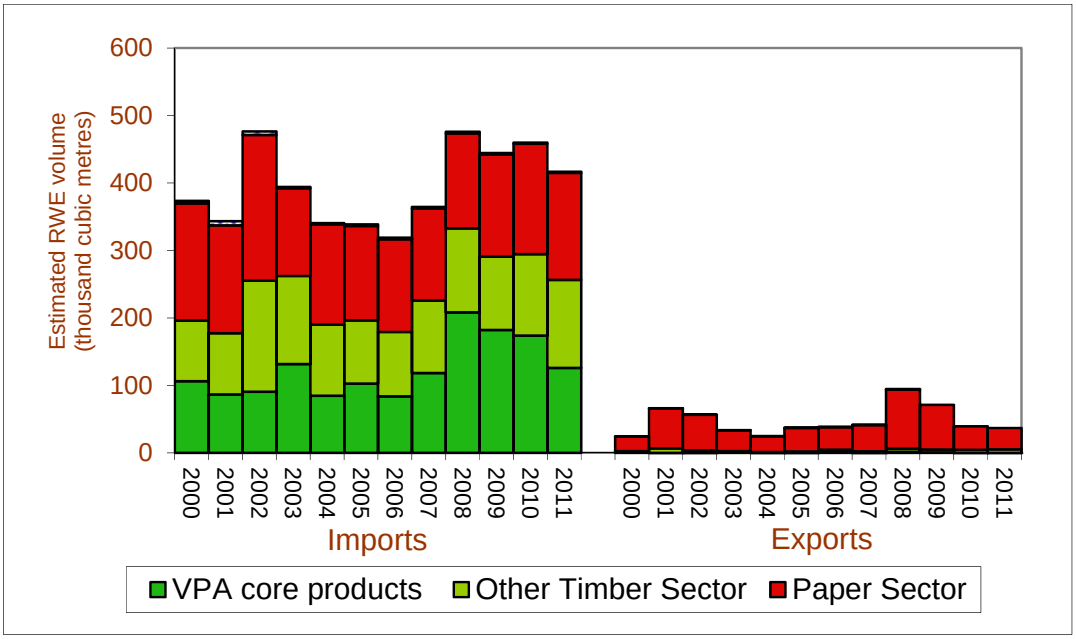


**Figure 40 Botswana's trade in wood based products, RWE volume basis/ Figure 40 Le commerce au Botswana de produits dérivés du bois, sur base de volume équivalent en bois rond**

**Source: Based on data provided by Botswana and presented in UN Comtrade, 2012**

According to the below figure, Botswana's cost of importing timber sector products now amounts to around 130 million USD/year for the around 450,000 m3 RWE that according to the figure above are imported. The import for the paper sector, almost 200,000 RWE m3/year, is around 100 million USD/year.

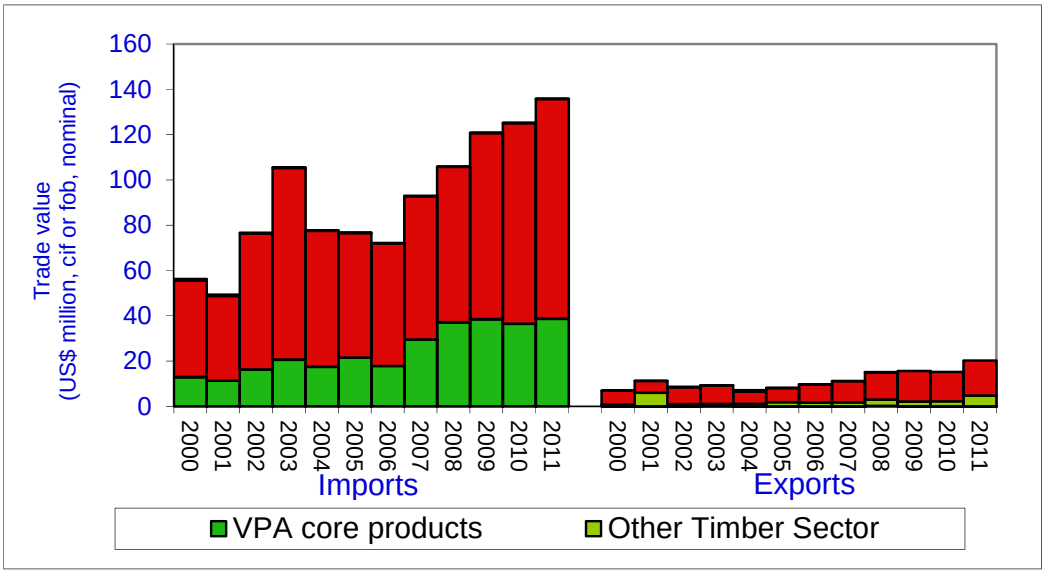


**Figure 41 Botswana's trade in wood based products, trade value basis/ Figure 41 Le commerce de produits dérivés du bois au Botswana, sur base de valeur commerciale**

**Source: Based on data provided by Botswana and presented in UN Comtrade, 2012**

Six further charts are presented on the next pages, as figure 42, showing Botswana's trade in selected wood-based products 2000-2012, by partner country. These charts show trends in the import of "VPA core products" (defined as the products which must be included in a VPA - namely, logs, sawn wood, veneer and plywood), imports of other products of the timber sector, imports and exports of paper sector products, and imports of sawn wood and wooden furniture.

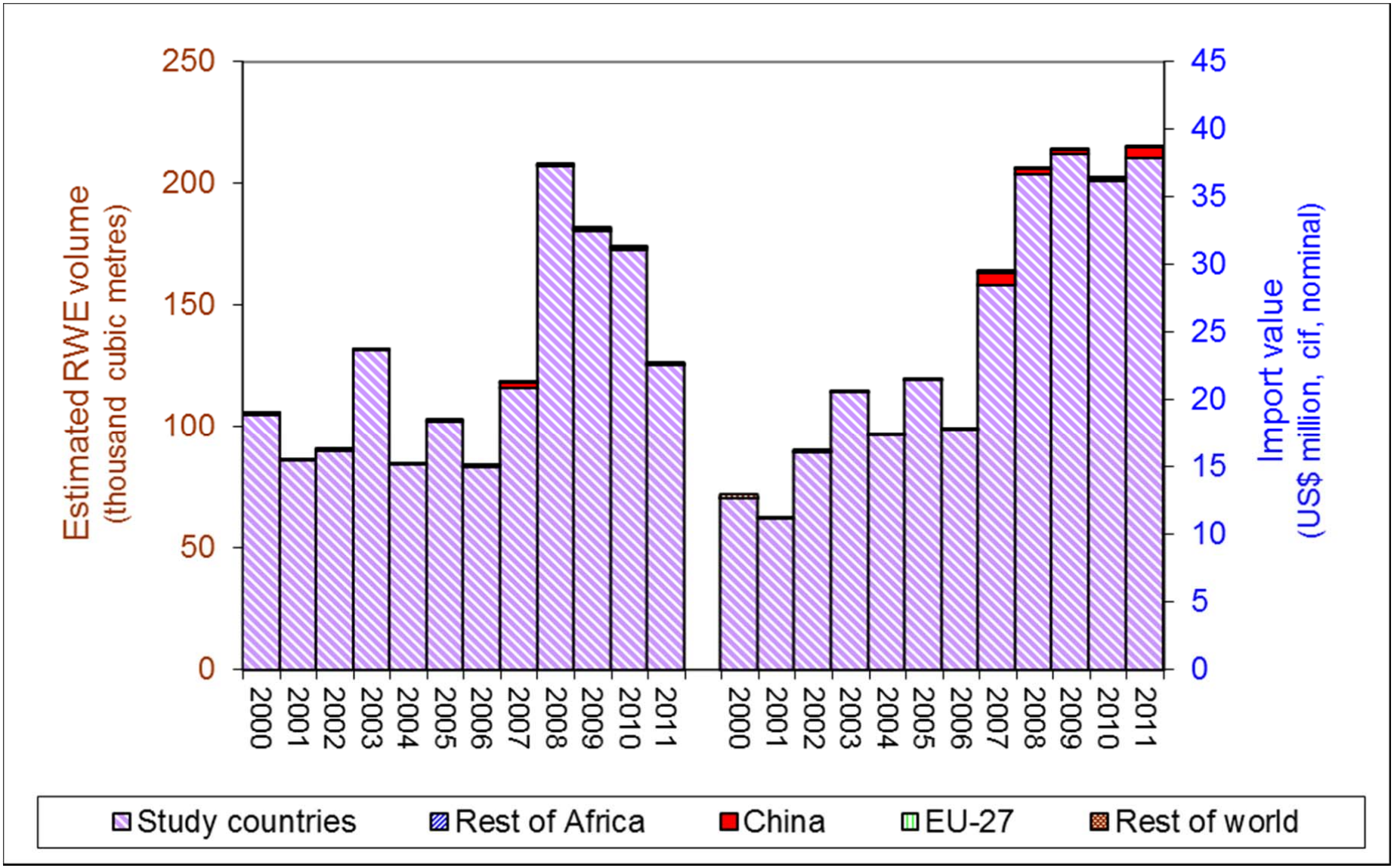


**Figure 42 Botswana's Imports of VPA core products (2000-2011), by partner country/ Figure 42 Importation de produits de base APV du Botswana (2000-2011)**

**Source: Based on data provided by Botswana and presented in UN Comtrade, 2012**

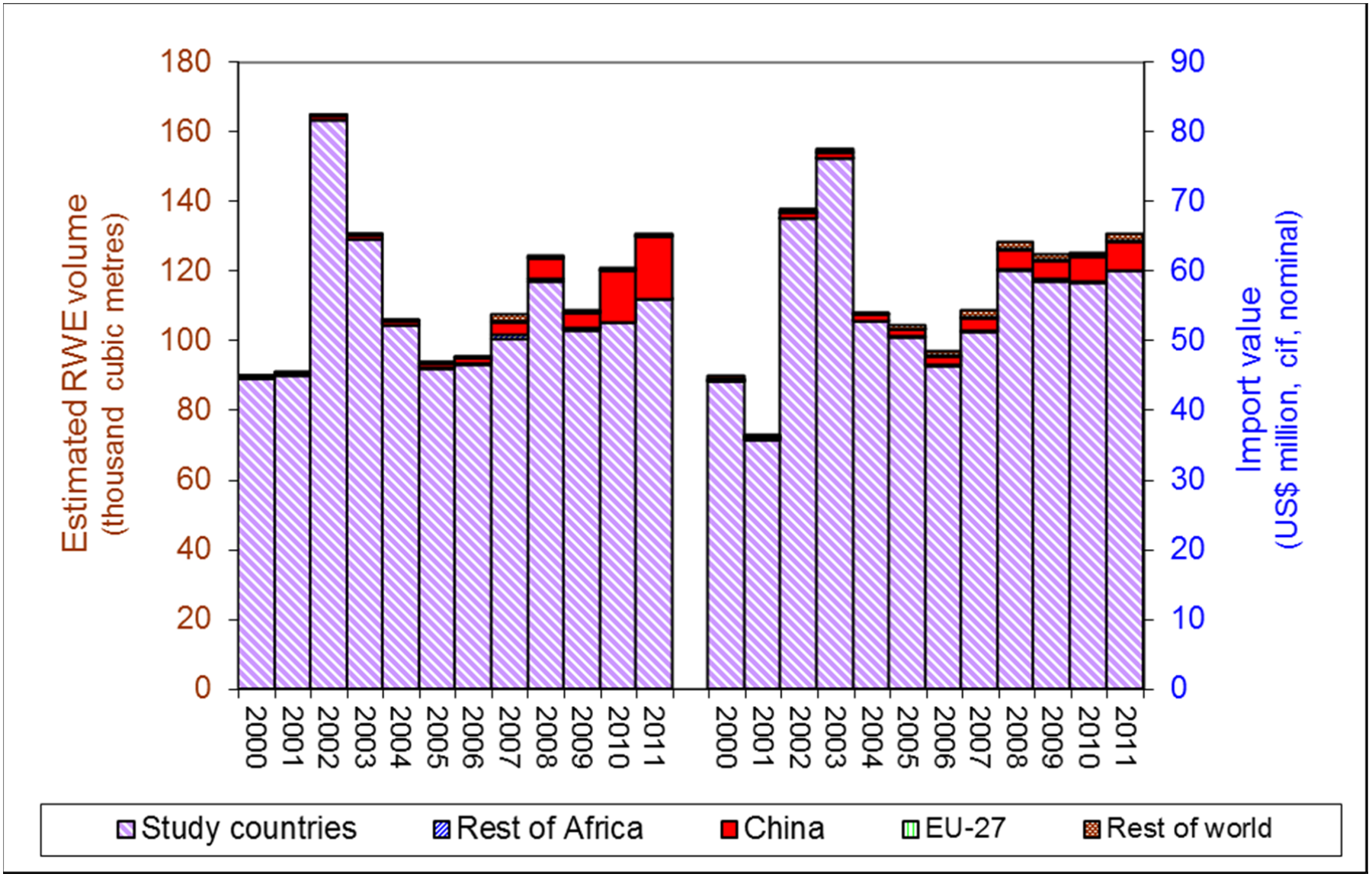


**Figure 43 Botswana's Imports of other timber sector core products (2000-2011), by partner country/ Figure 43 Importations d'autres produits du secteur bois du Botswana (2000-2011)**

**Source: Based on data provided by Botswana and presented in UN Comtrade, 2012**

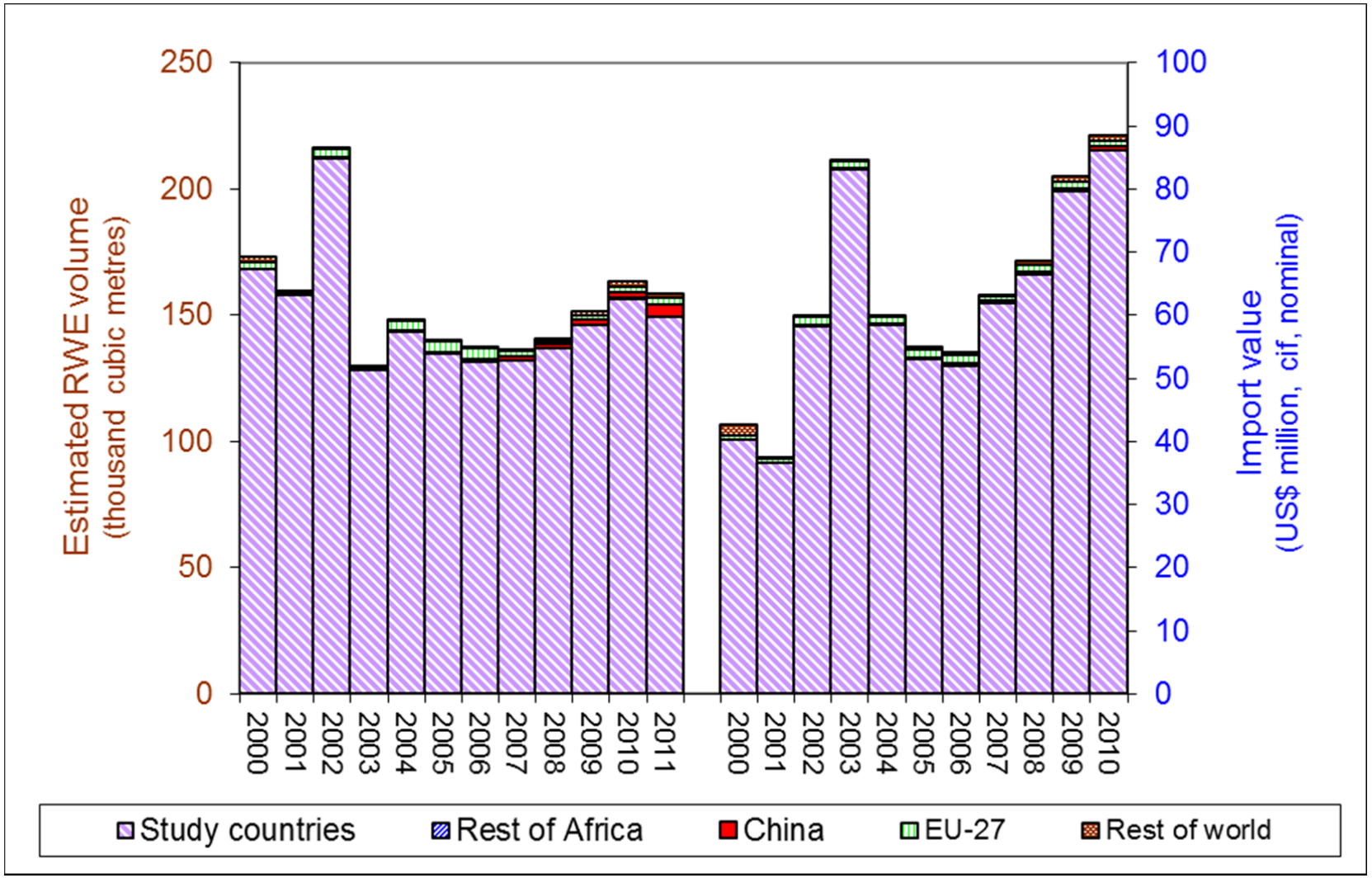


**Figure 44 Botswana's Imports of paper sector products (2000-2010), by product/ Figure 44 Importations de produits du secteur papier du Botswana (2000-2010)**
**Source: Based on data provided by Botswana and presented in UN Comtrade, 2012**

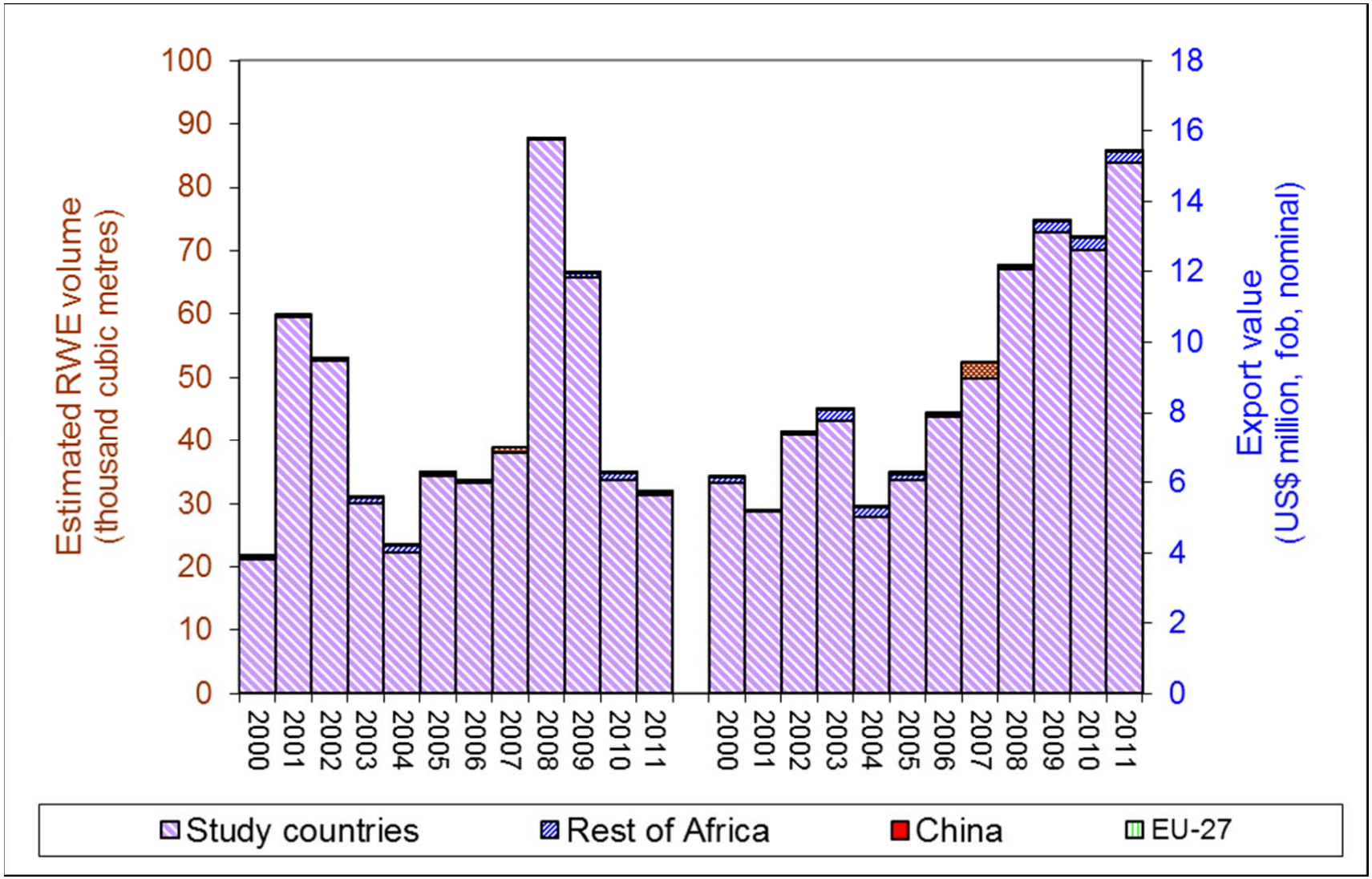


**Figure 45 Botswana's Exports of paper sector products (2000-2011), by product/ Figure 45 Exportations de produits du secteur papier du Botswana (2000 -2011)**
**Source: Based on data provided by Botswana and presented in UN Comtrade, 2012**

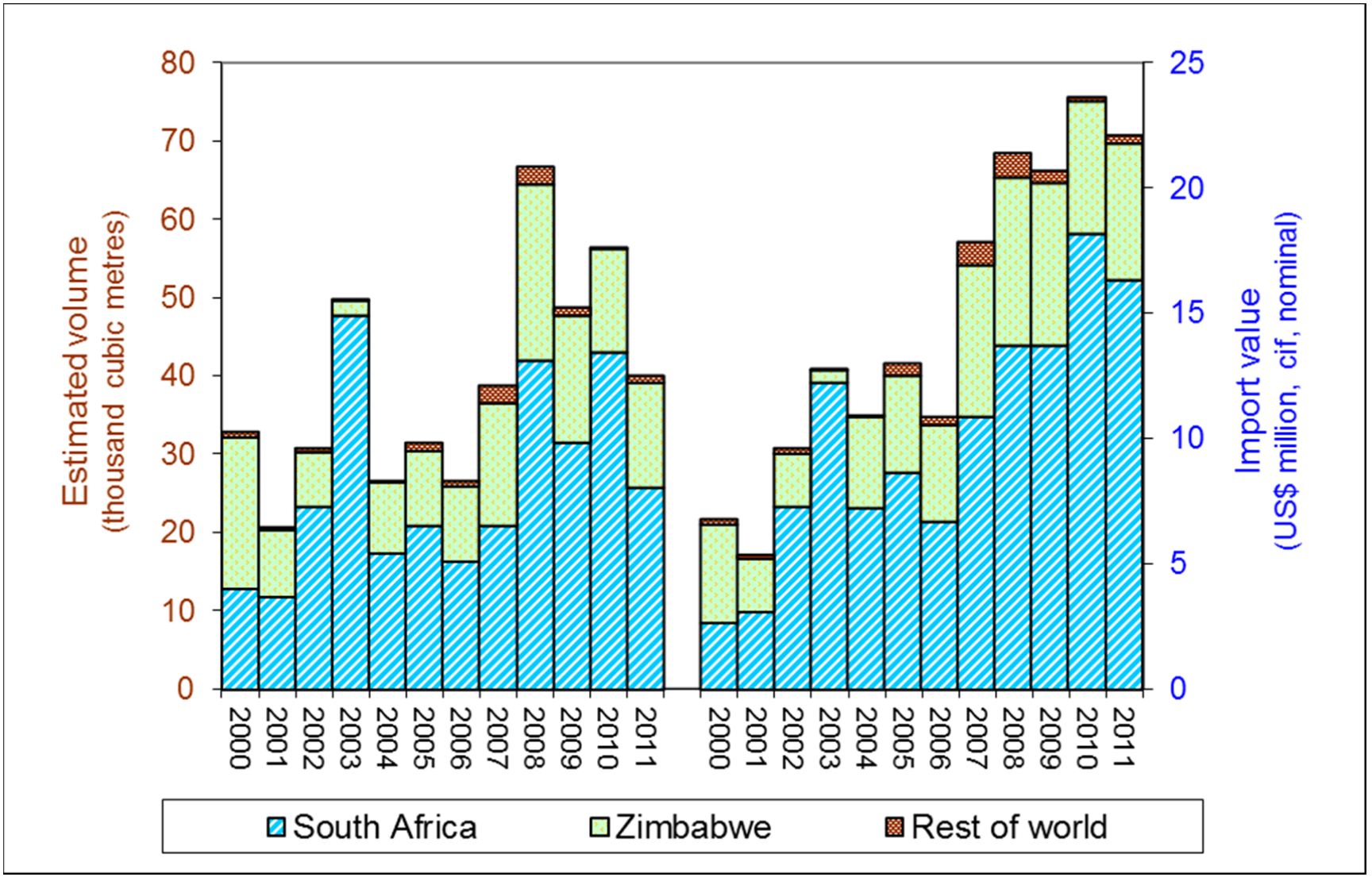


**Figure 46 Botswana's Imports of sawn wood (2000-2011), by product/ Figure 46 Importations de bois de sciage du Botswana (2000-2011), par produit**
**Source: Based on data provided by Botswana and presented in UN Comtrade, 2012**

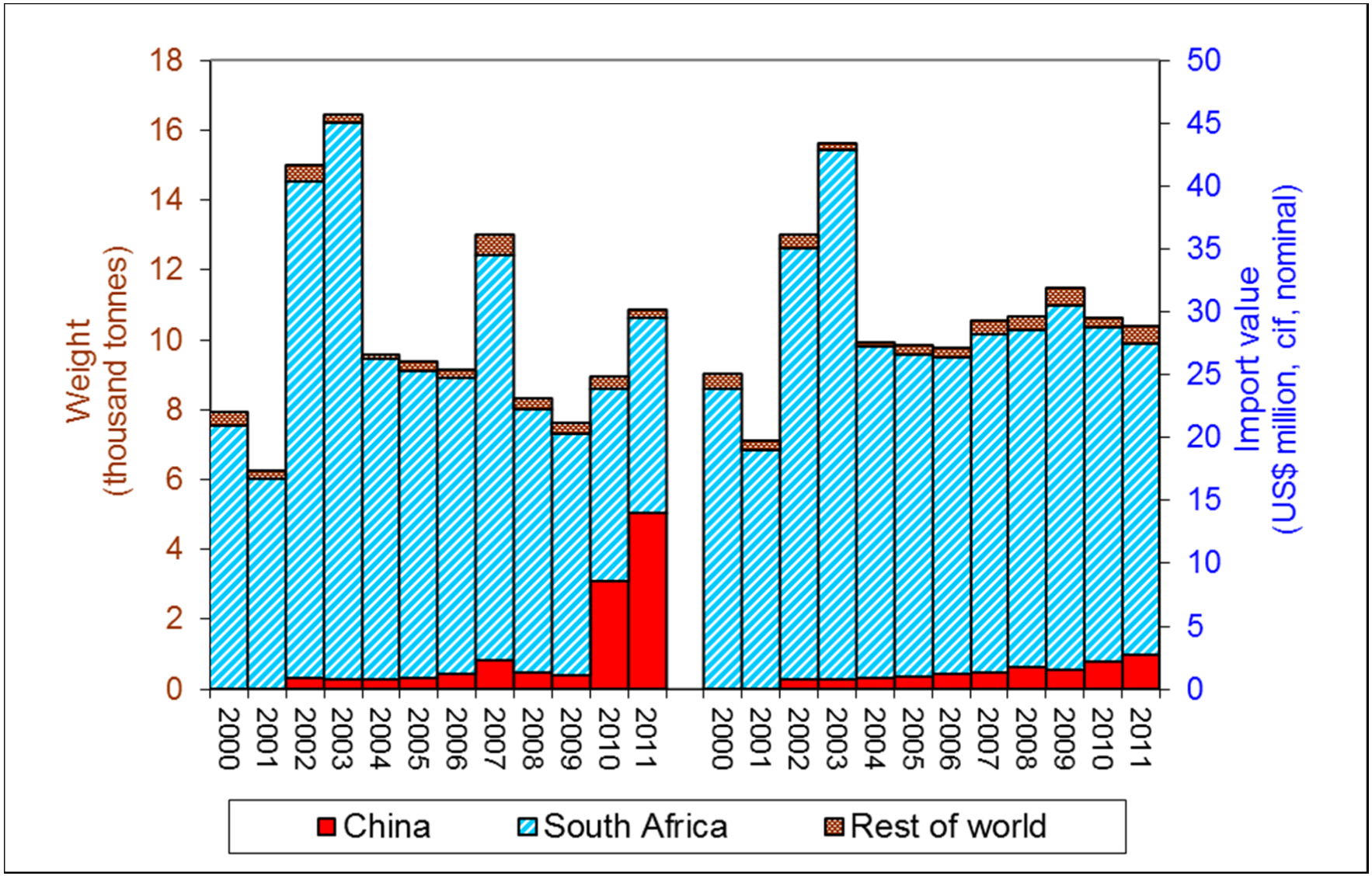


**Figure 47 Botswana's Imports of wooden furniture (2000-2011), by product/ Figure 47 Importations de meubles en bois du Botswana (2000-2011), par produit**
**Source: Based on data provided by Botswana and presented in UN Comtrade, 2012**

## Annex 17 Overview of Malawi's Trade in Wood Based Products

This annex has been included to provide a baseline for the timber trade flow within, from and to Malawi. The information presented below is largely based on data from UN Comtrade. No field work took place in Malawi.

Malawi had little trade in timber until the second half of last decade, when its exports of sawn wood and plywood increased rapidly, see the below figure.

Paper, supplied mainly from the EU, South Africa and Zimbabwe, accounts for most of Malawi's trade in wood-based products. The quantity imported doubled during the last decade.

It is believed that approximately 80% of the timber which leaves Malawi was unrecorded and implicitly illegal prior to being temporarily prohibited during June 2011.[10]

[10] http://www.trademarksa.org/news/kenyan-timber-traders-held-malawi-changes-law

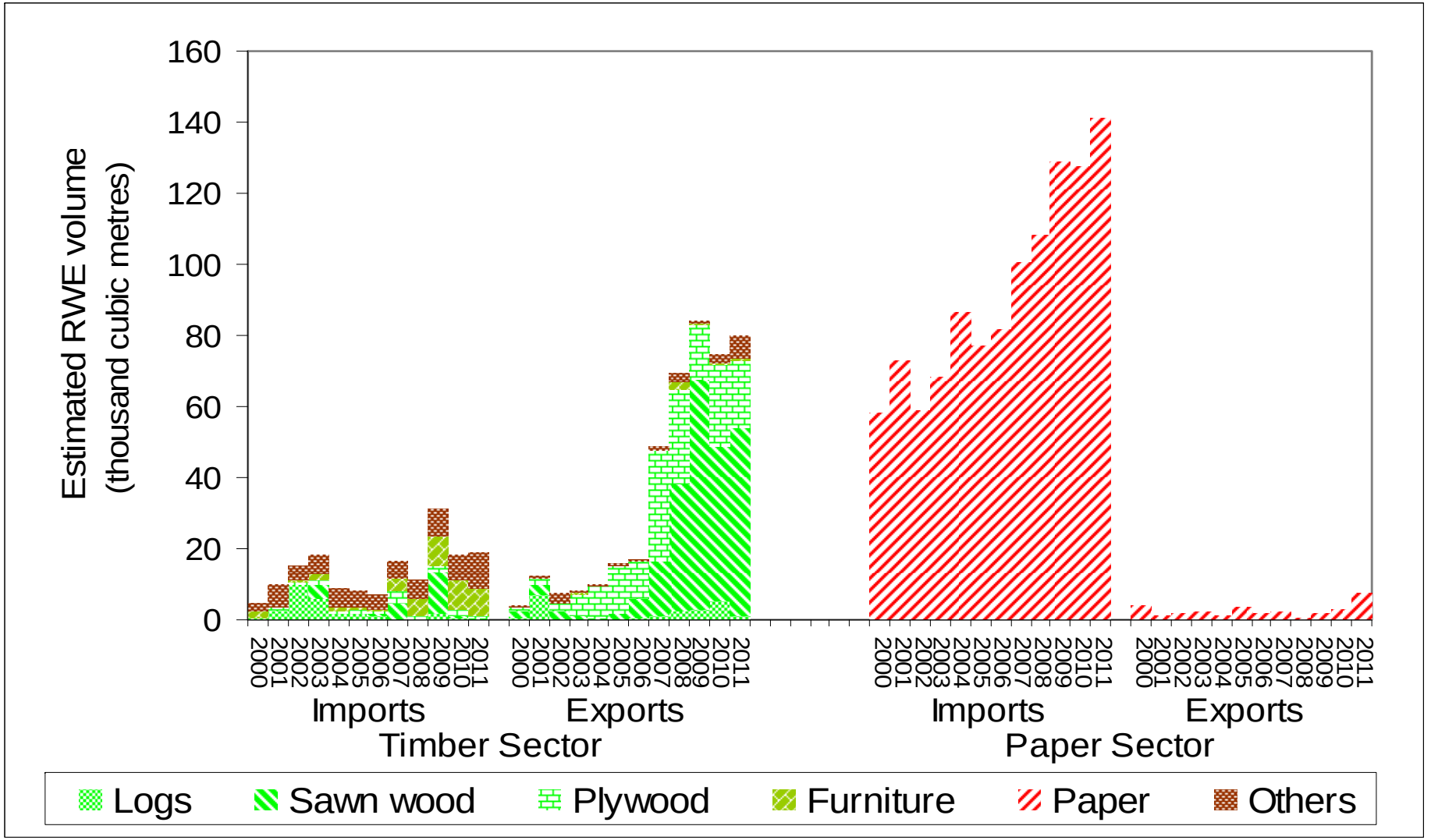


**Figure 48 Malawi's trade in wood-based products (2000-2011, by product)/ Figure 48 Le commerce de produits dérivés du bois au Malawi (2000-2011, par produit)**

**Source: Based on data provided by Malawi and presented in UN Comtrade, 2012**

The increase in exports has considerably added to pressure on Malawi's tree plantations. Exports are now believed to account for 50% of industrial roundwood production in Malawi. It has also caused prices paid by end-users in Malawi to rise locally. Some, perhaps most, of those exports involve foreign buyers operating illegally through Malawians locally, taking advantage of weak law enforcement within Malawi. This foreign interest (associated with the increase in local prices) has become a volatile political issue locally.[11] The export of timber is said to be prohibited.

The increasing imports, see figure 48, consist mainly of paper. The export of timber sector products contains value added products including plywood and furniture. The plywood exported from Malawi is likely to have been made by Raiply, a large, well-placed regional timber group which has a concession to manage much of the Viphya tree plantation.[12]

Most timber production in Malawi derives from state-owned tree plantations, primarily pine, particularly from Viphya. Much of the remainder comprises non-coniferous logs (of eucalyptus) destined for use as poles. The country's Auditor General has reported to the government on illegality and malpractice concerning the exploitation of the Viphya plantation.[13]

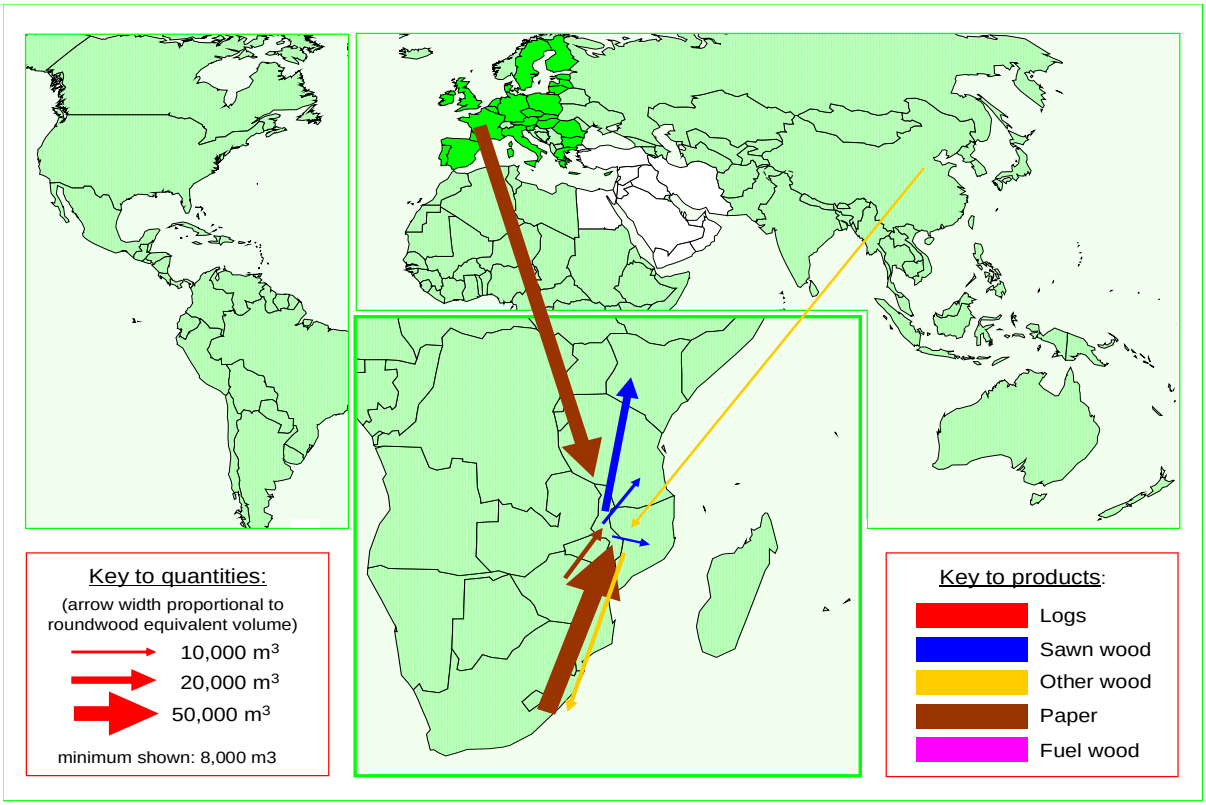


**Figure 49 Malawi's trade in wood-based products (2011)/ Figure 49 Carte illustrant le commerce de produits dérivés du bois du Malawi (2011)**

**Source: Based on data provided by Malawi and presented in UN Comtrade, 2012**

The figure above shows that the export of sawn wood primarily reaches Kenya, Mozambique and Tanzania, possibly also to South Africa and Zambia.

[11] Pages 16-18 "The Timber Trade in Malawi" Southern Africa Resource Watch (2009)
[12] http://gondwe-gregory.blogspot.co.uk/2009/08/massacre-of-malawis-multi-million.html
[13] http://www.nyasatimes.com/malawi/2011/12/06/massive-malpractices-exposed-at-viphya-%E2%80%93audit-report/

From figure 50 below can be seen the import of wood-based products is on the increase. Figure 56 shows a similar increase for paper sector products. Malawi's export of timber sector products has increased in recent years, while the import is low, having remained fairly even over the years.

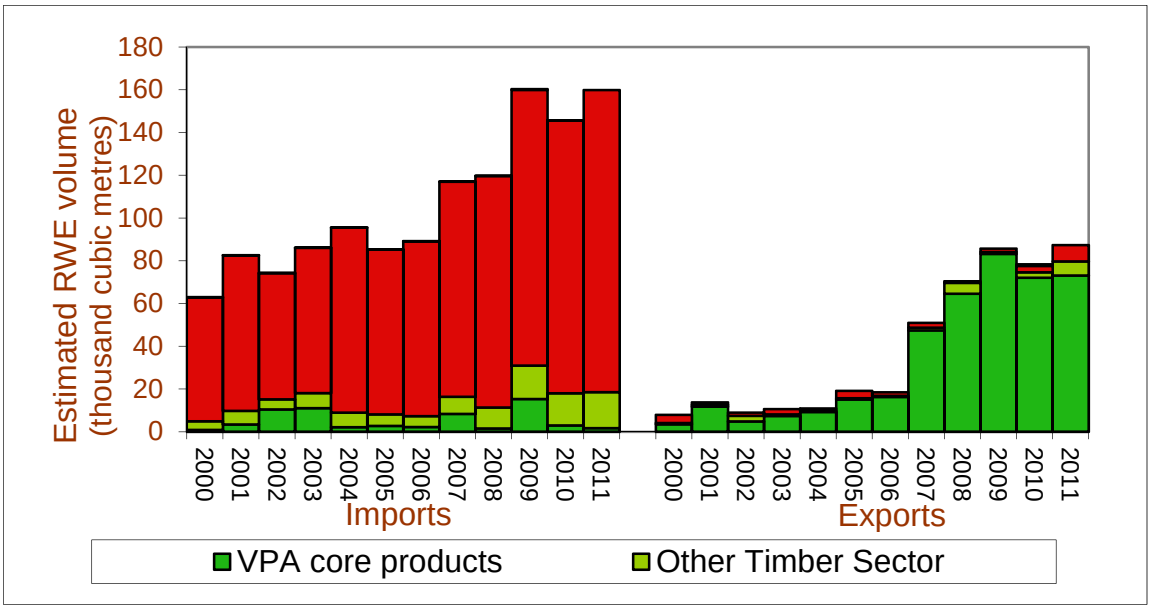


**Figure 50 Malawi's trade in wood based products, RWE volume basis/ Figure 50 Le commerce de produits dérivés du bois, sur base de volume équivalent en bois rond au Malawi**

**Source: Based on data provided by Malawi and presented in UN Comtrade, 2012**

Malawi's export of wood based products is worth around 12 million USD annually, see figure 51 below. The volume is around 75 million m3 RWE, see the above figure.

Malawi's import bill for the paper sector has now reached about 60 million USD, see the below figure.

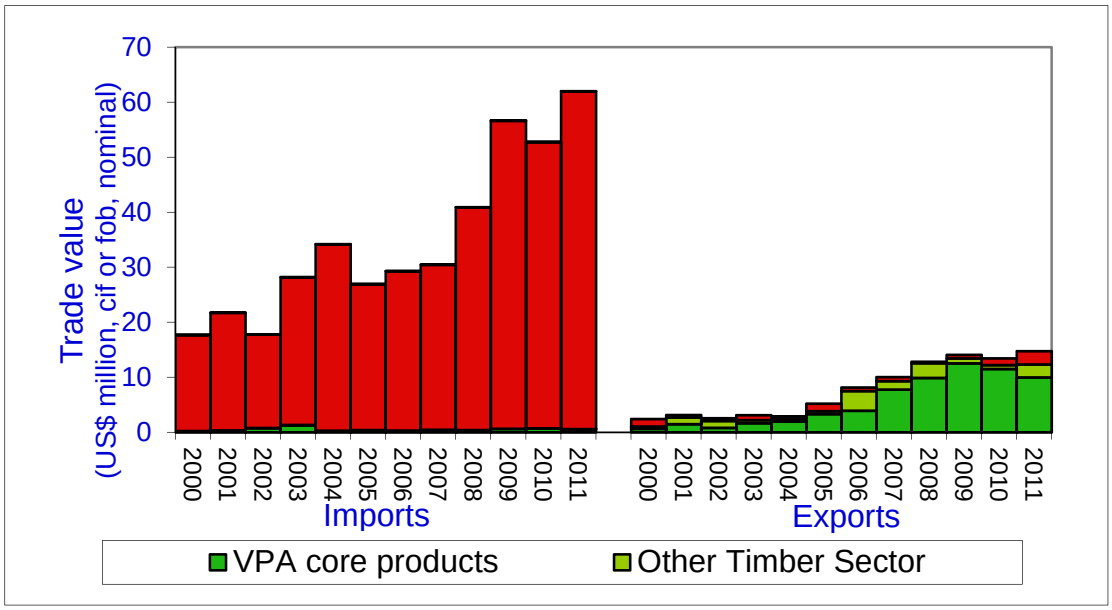


**Figure 51 Malawi's trade in wood based products, trade value basis/ Figure 51 Le commerce de produits dérivés du bois, sur base de valeur commerciale au Malawi**

**Source: Based on data provided by Malawi and presented in UN Comtrade, 2012**

Eight further charts are presented on the next two pages, as Figure 52, showing Malawi's trade in selected groups of wood-based products 2000-2012, by partner country. Six of these illustrate trends in the imports and exports of three specific groups of product – "VPA core products" (defined as the products which must be included in a VPA - namely, logs, sawn wood, veneer and plywood), other products of the timber sector, and products for the paper sector. The last two illustrate trends in the export of sawn wood and plywood.

As Malawi's exports derive predominantly from a small number of tree plantations and are destined for sub-Saharan Africa, with negligible quantities being exported to the EU, there is little scope for the EU to seek to negotiate a VPA with Malawi.

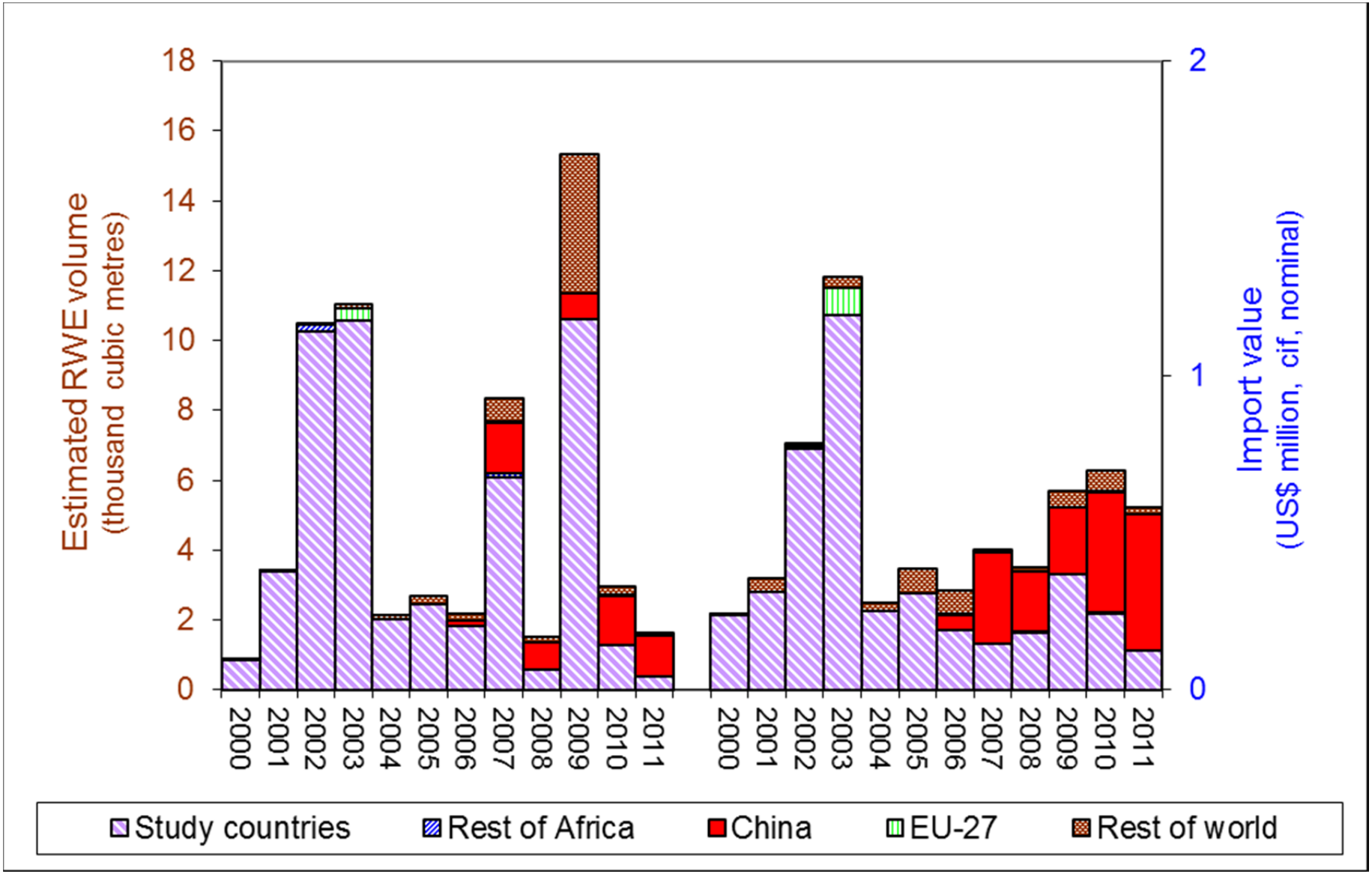


**Figure 52 Malawi's Imports of VPA core products (2000-2011), by partner country/ Figure 52 Importations de produits de base APV du Malawi (2000-2011), par pays partenaire**

**Source: Based on data provided by Malawi and presented in UN Comtrade, 2012**

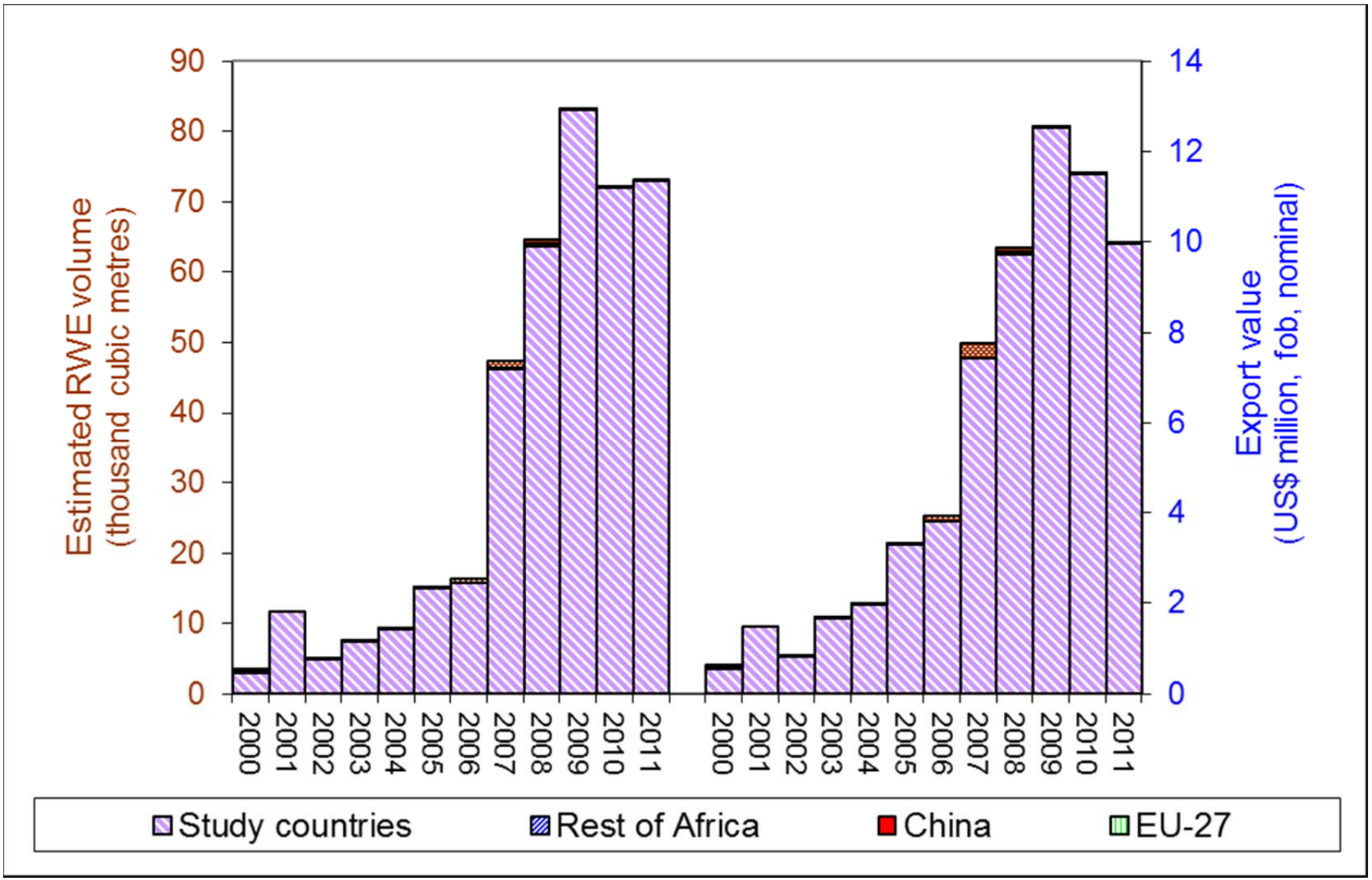


**Figure 53 Malawi's Exports of VPA core products (2000-2011), by partner country/ Figure 53 Exportations de produits de base APV du Malawi (2000-2011), par pays partenaire**

**Source: Based on data provided by Malawi and presented in UN Comtrade, 2012**

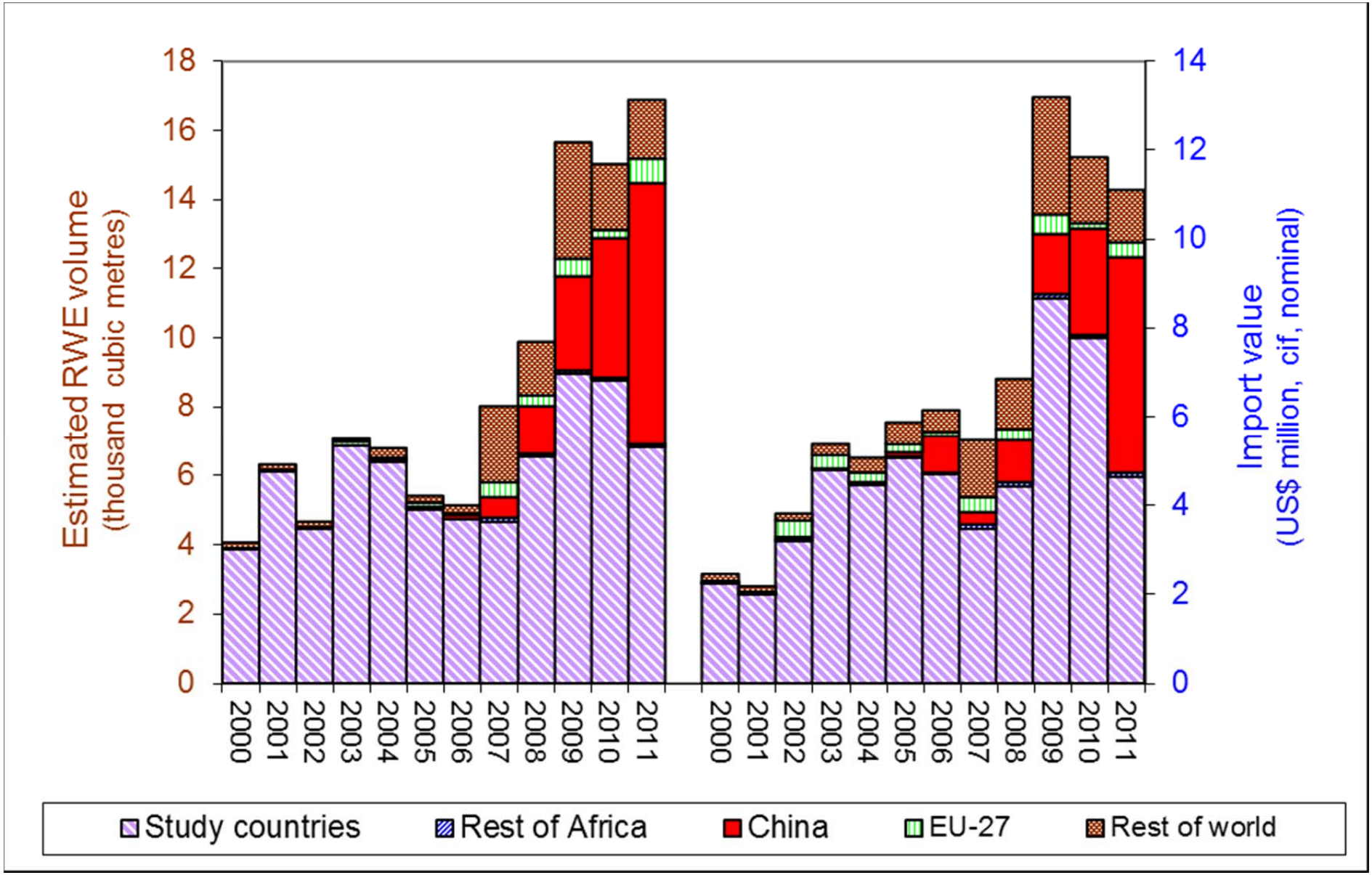


**Figure 54 Malawi's Imports of other timber sector products (2000-2011)/ Figure 54 Importations d'autres produits du secteur bois (2000-2011) au Malawi**

**Source: Based on data provided by Malawi and presented in UN Comtrade, 2012**

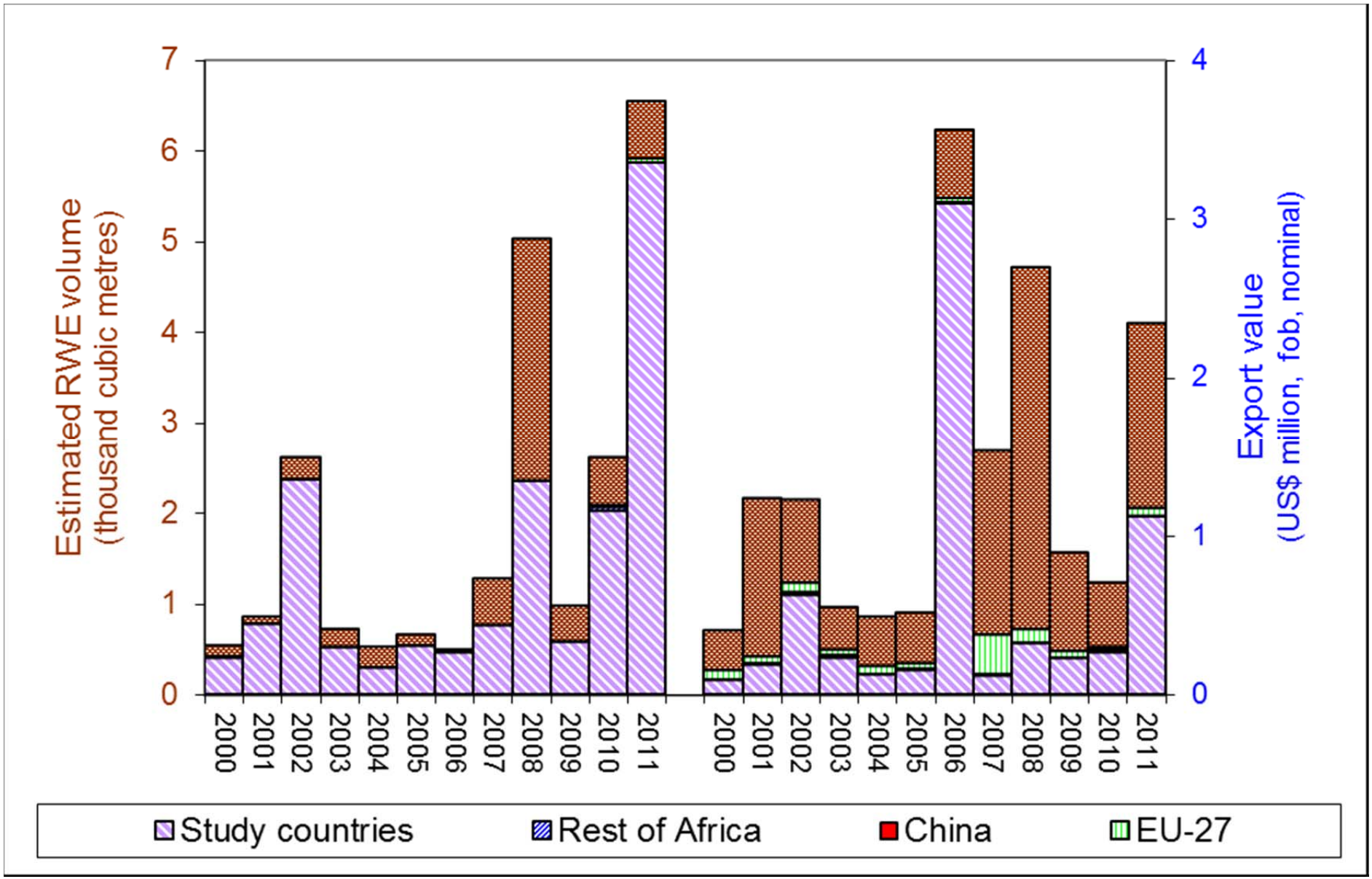


**Figure 55 Malawi's Exports of other timber sector products (2000-2011), by partner country/ Figure 55 Exportations d'autres produits du secteur bois au Malawi (2000-2011), par pays partenaire**

**Source: Based on data provided by Malawi and presented in UN Comtrade, 2012**

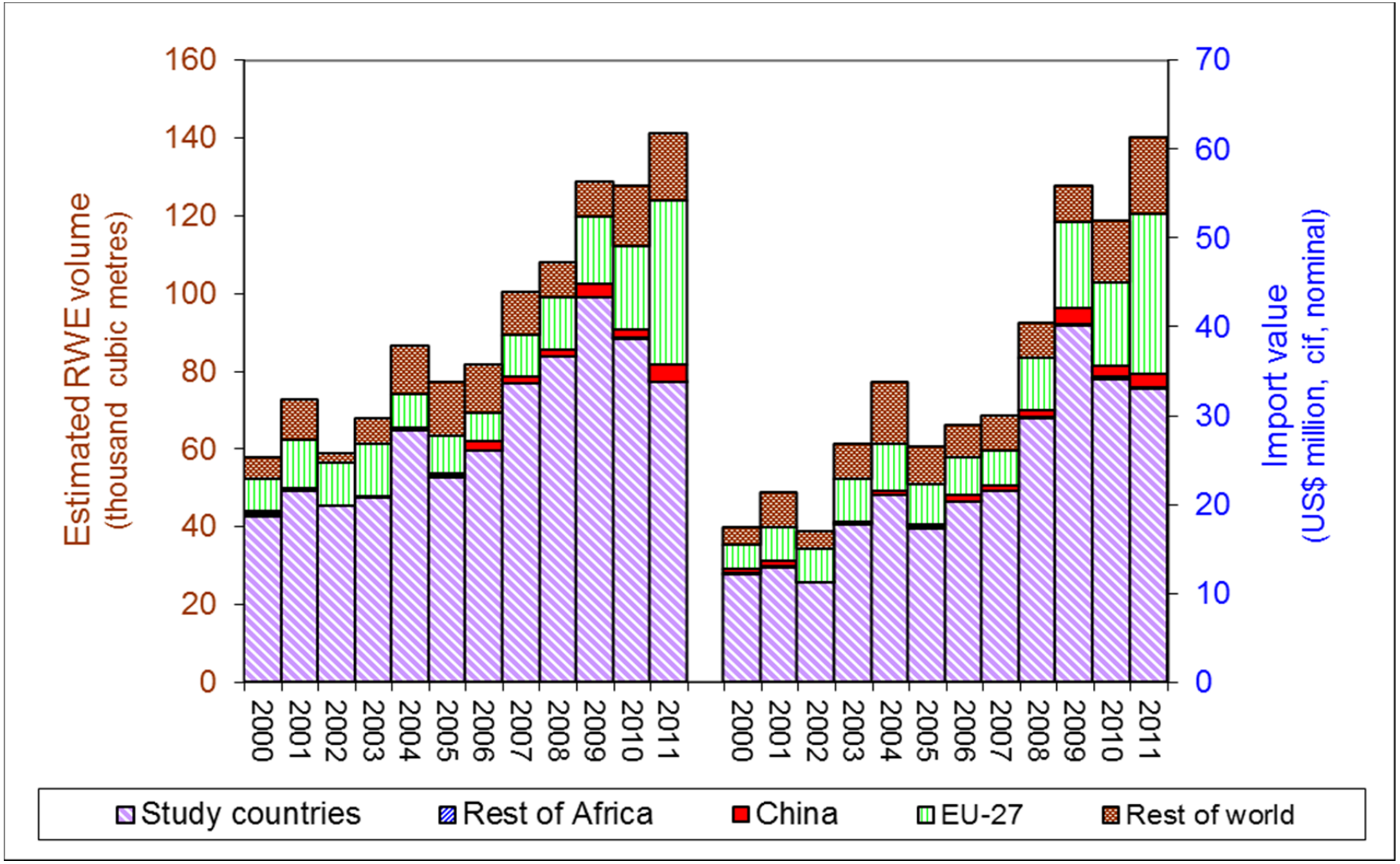


**Figure 56 Malawi's Imports of paper sector products (2000-2011), by partner country/ Figure 56 Importations de produits du secteur papier du Malawi (2000-2011), par pays partenaire**

**Source: Based on data provided by Malawi and presented in UN Comtrade, 2012**

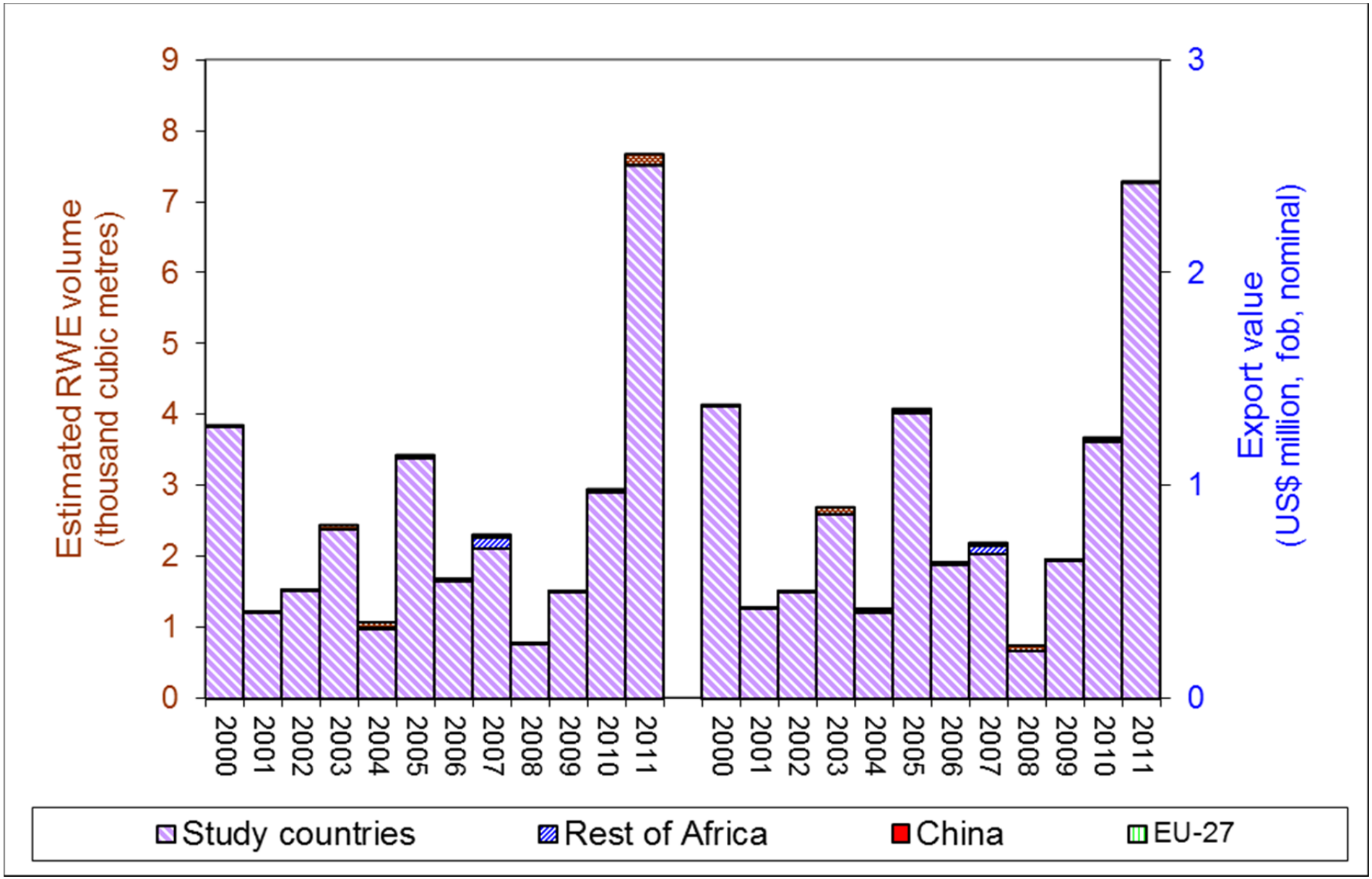


**Figure 57 Malawi's Exports of paper sector products (2000-2011), by partner country/ Figure 57 Exportations de produits du secteur papier du Malawi (2000-2011), par pays partenaires**

**Source: Based on data provided by Malawi and presented in UN Comtrade, 2012**

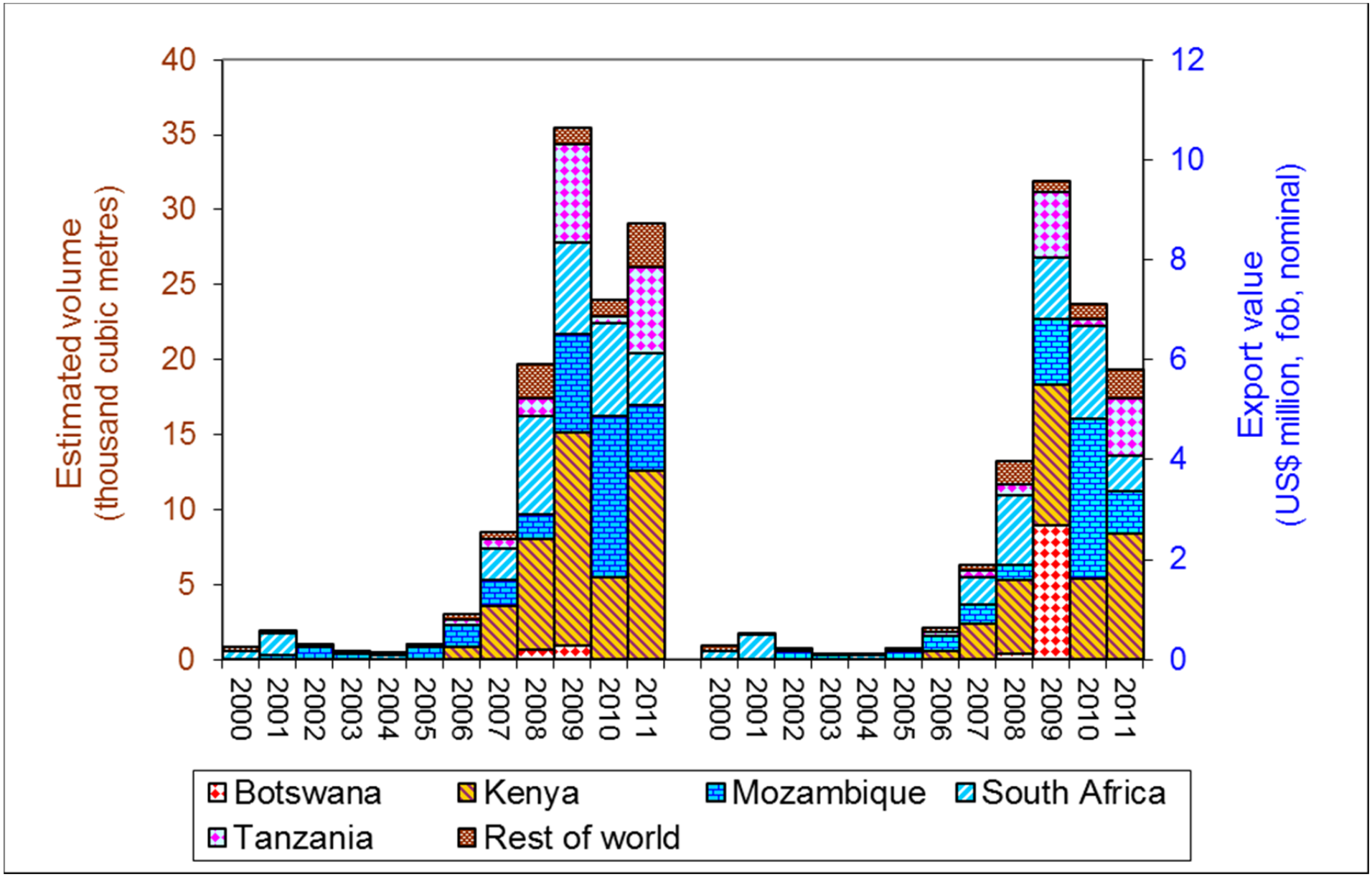


**Figure 58 Malawi's Exports of sawn wood (2000-2011), by partner country/ Figure 58 Exportations de bois de sciage du Malawi (2000-2011), par pays partenaire**

**Source: Based on data provided by Malawi and presented in UN Comtrade, 2012**

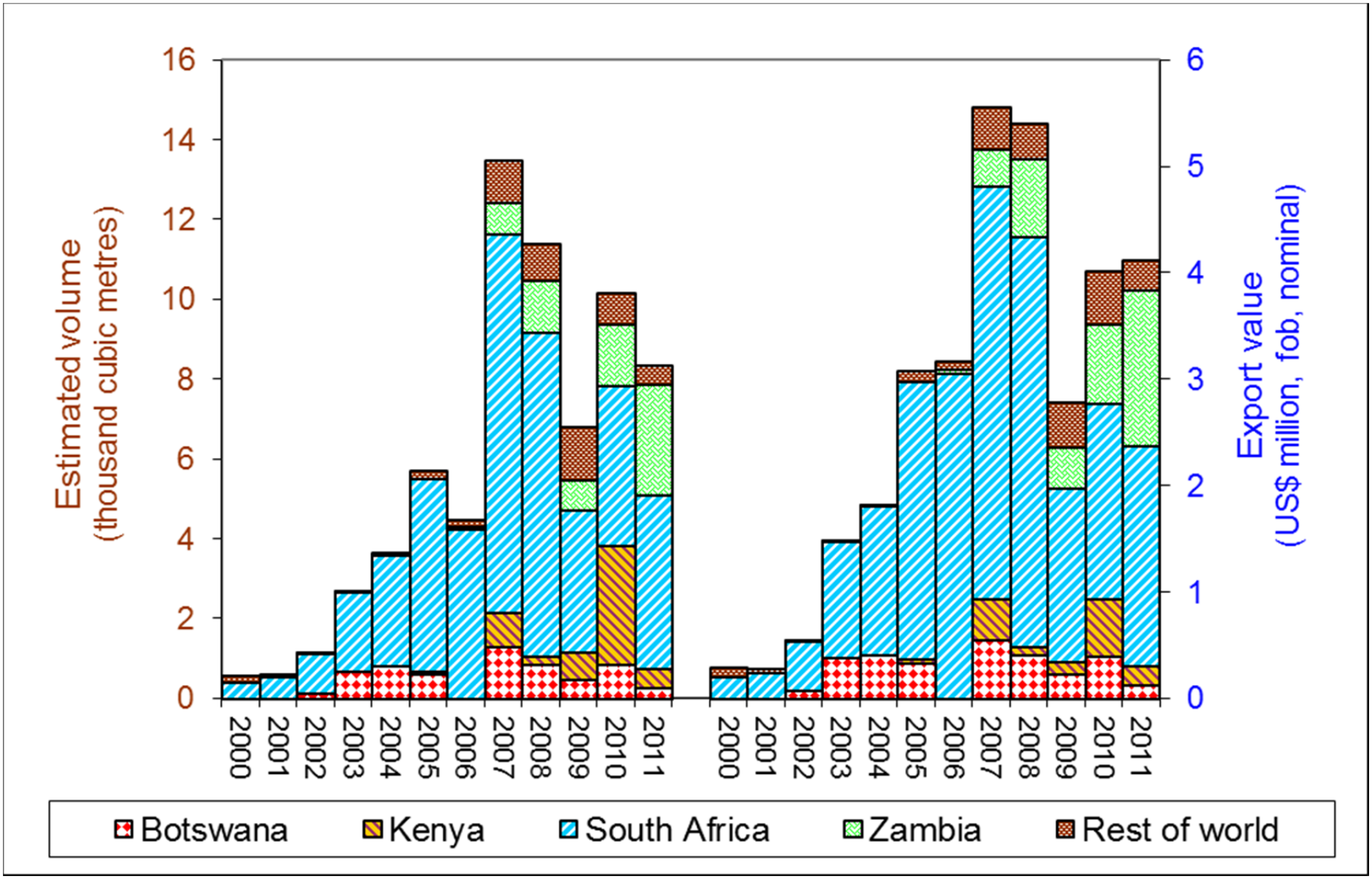


**Figure 59 Malawi's Exports of plywood (2000-2011), by partner country/ Figure 58 Exportations de bois contre-plaqué du Malawi (2000-2011), par pays partenaire**

**Source: Based on data provided by Malawi and presented in UN Comtrade, 2012**

## Annex 18 Overview of Zimbabwe's Trade in Wood Based Products

This annex has been included to provide a baseline for the timber trade flow within, from and to Zimbabwe. The information presented below is largely based on data from UN Comtrade. No field work took place in Zimbabwe.

Political "reforms" within Zimbabwe have led to the collapse of much of the country's timber industry not least as a consequence of damage (particularly by illegal resettlement schemes and fire) to much of the area previously covered by tree plantations, primarily pine, but also eucalyptus and wattle – predominantly in Manicaland.[14] Three groups account for much of the industry in this region, Allied Timbers, Border Timbers (which exports most of its output) and the Wattle Company (whose output includes charcoal).

Pressure on woodland in Zimbabwe for use as fuel is acute, largely in response to a decline in availability and affordability of alternatives, both for curing tobacco and basic household needs.

[14] http://thinkafricapress.com/zimbabwe/zanu-reforms-threaten-zimbabwe-timber-industry

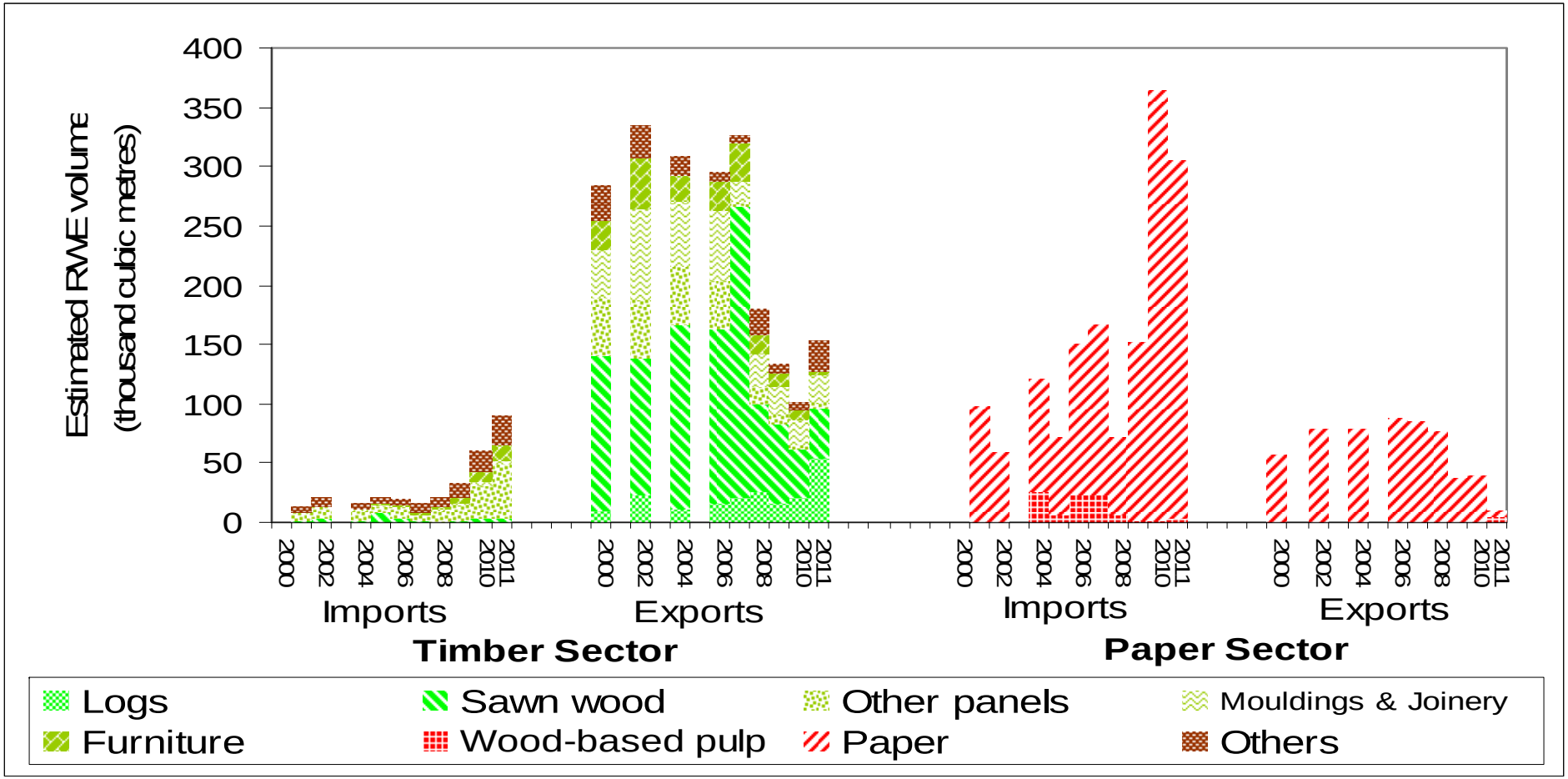


**Figure 60 Zimbabwe's trade in selected groups of wood-based product (2000-2011, by product)/ Figure 60 Le commerce de groupes sélectionnés de produits dérivés du bois (2000-2011, par pays produits) au Zimbabwe**

**Source: Based on data provided by Zimbabwe and presented in UN Comtrade, 2012**

From figure 60 above can be seen that Zimbabwe's exports of most timber products (other than logs) have declined by about half in terms of physical quantity since the middle of last decade. Much of the country's paper production has ceased.[15]

Most of the reduction in timber exports concerns sawn coniferous wood destined for South Africa. In contrast, Zimbabwe's exports of sawn wood, mouldings and joinery to Botswana have changed little. Botswana accounts for most of the increasing volume of logs which Zimbabwe exports.

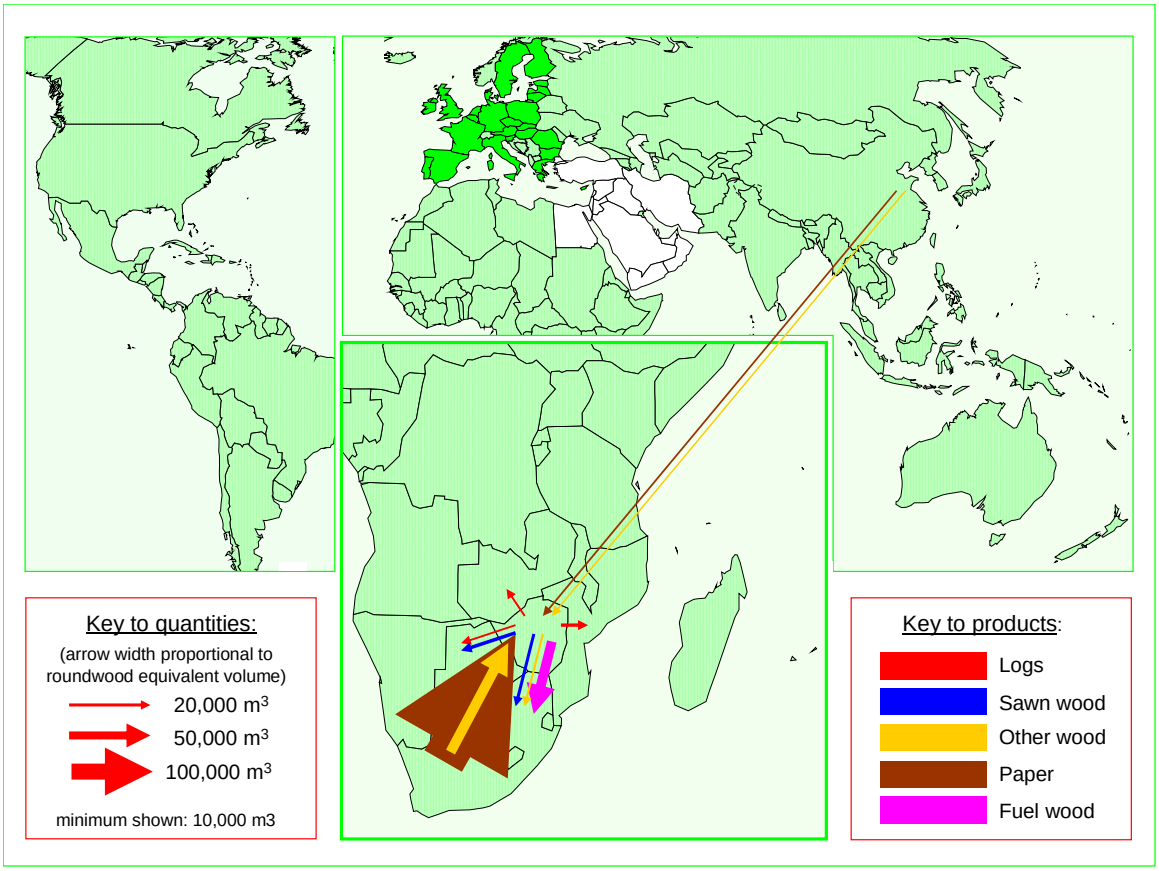


**Figure 61 Zimbabwe's trade in wood-based products (2011)/ Figure 61 Carte illustrant le commerce de produits dérivés du bois du Zimbabwe (2011)**

**Source: Based on data provided by Zimbabwe and presented in UN Comtrade, 2012**

South Africa is the leading destination for Zimbabwe's exports of fuel wood (predominantly charcoal) and most timber (particularly wooden furniture, panels other than plywood, see the above figure. At the same time, South Africa supplies the great majority of Zimbabwe's imports of wood-based products

[15] Mills using virgin pulp which have closed recently include that of Hunyani Holdings - http://allafrica.com/stories/201106201364.html and ART's Mutare paper mill - http://www.artcorp.co.zw/images/pdf/art_group_financial_resuls_yearend_2011_1.pdf

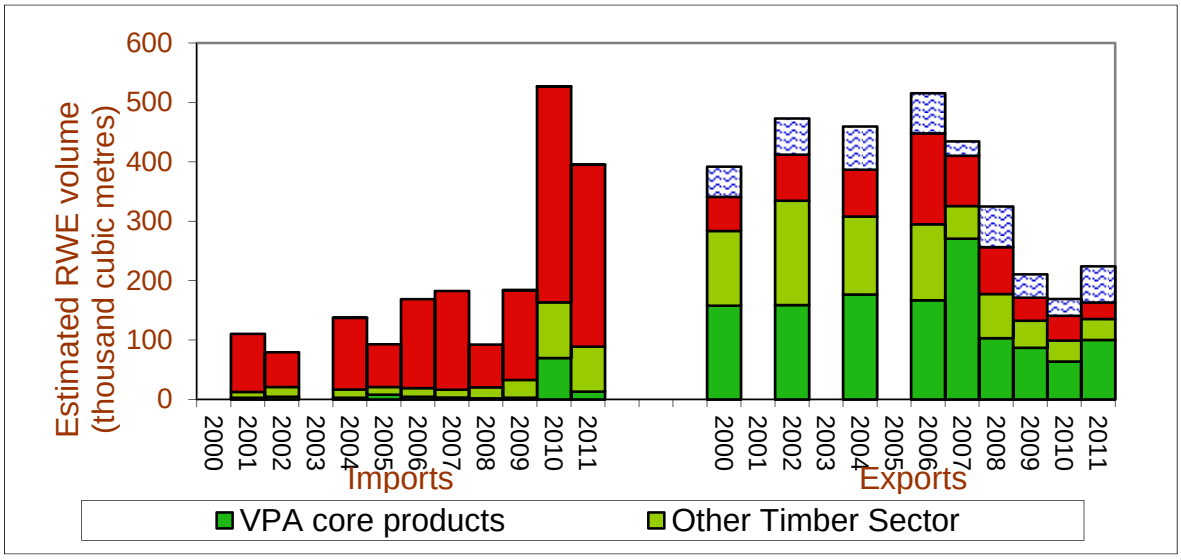


**Figure 62 Zimbabwe's trade in wood based products, RWE volume basis/ Figure 62 Le commerce de produits dérivés du bois, sur base de volume équivalent en bois rond au Zimbabwe**

**Source: Based on data provided by Zimbabwe and presented in UN Comtrade, 2012**

Figure 62 above shows a sharp increase in the import of wood based products, as well as a declining export, indicating that the gap is widening. Overall, Zimbabwe's imports of timber have increased since the middle of last decade, helping offset the decline in the manufacture of timber products within Zimbabwe. Panels other than plywood account for most of the total imported.

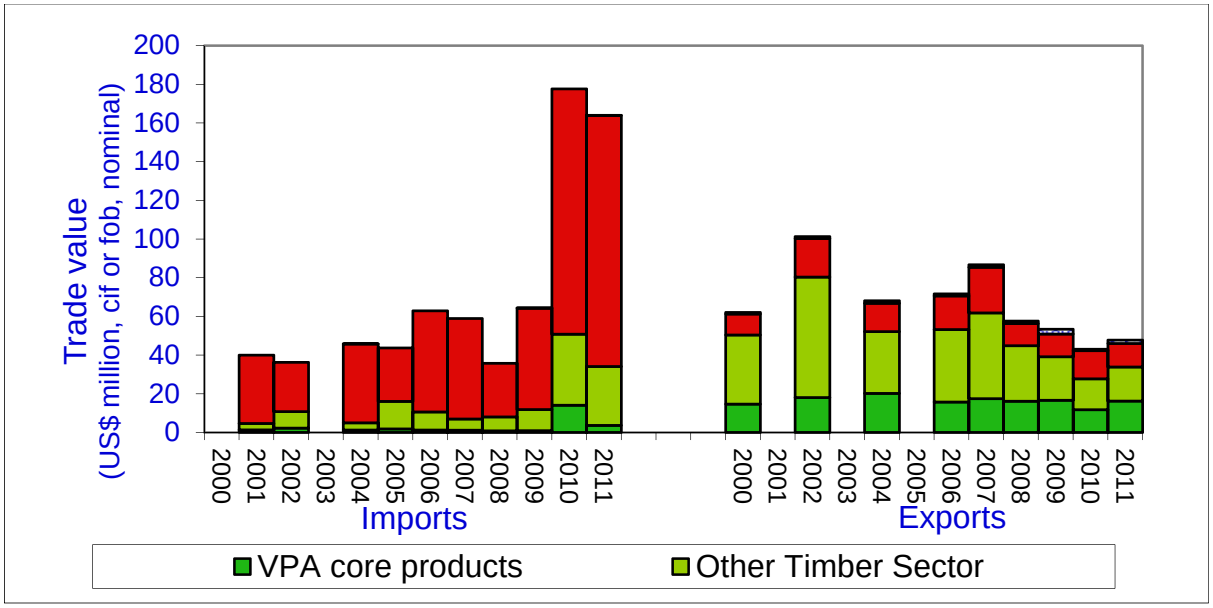


**Figure 63 Zimbabwe's trade in wood based products, trade value basis/ Figure 63 Le commerce au Zimbabwe de produits dérivés du bois, sur base de valeur commerciale**

**Source: Based on data provided by Zimbabwe and presented in UN Comtrade, 2012**

In Figure 68 can be seen that the increasing import of paper sector products now is worth over 130 million USD annually.

Since 2007, very small quantities of timber (and negligible quantities of paper or fuel wood) have been exported from Zimbabwe to the EU.

Eight further charts are presented on the next pages, as figure 52, showing Zimbabwe's trade in selected groups of wood-based products 2000-2012, by partner country. Six of these illustrate trends in the imports and exports of three specific groups of product – "VPA core products" (defined as the products which must be included in a VPA - namely, logs, sawn wood, veneer and plywood), other products of the timber sector, and products for the paper sector. The last two illustrate trends in the export of sawn wood and charcoal.

The antipathy to Europe expressed by the current government would be a major obstacle to negotiating a VPA with Zimbabwe. However, the country's timber industry has frequently expressed its desire for major improvements in forest law enforcement and governance.

There is very little direct trade in wood-based products between the EU and Zimbabwe. The EU is unlikely to import substantial quantities indirectly given that almost all Zimbabwe's timber exports derive from plantations and almost all those exports are destined for other countries in sub-Saharan Africa.

Consequently, it would be difficult for the EU to justify seeking a VPA with Zimbabwe in the foreseeable future.

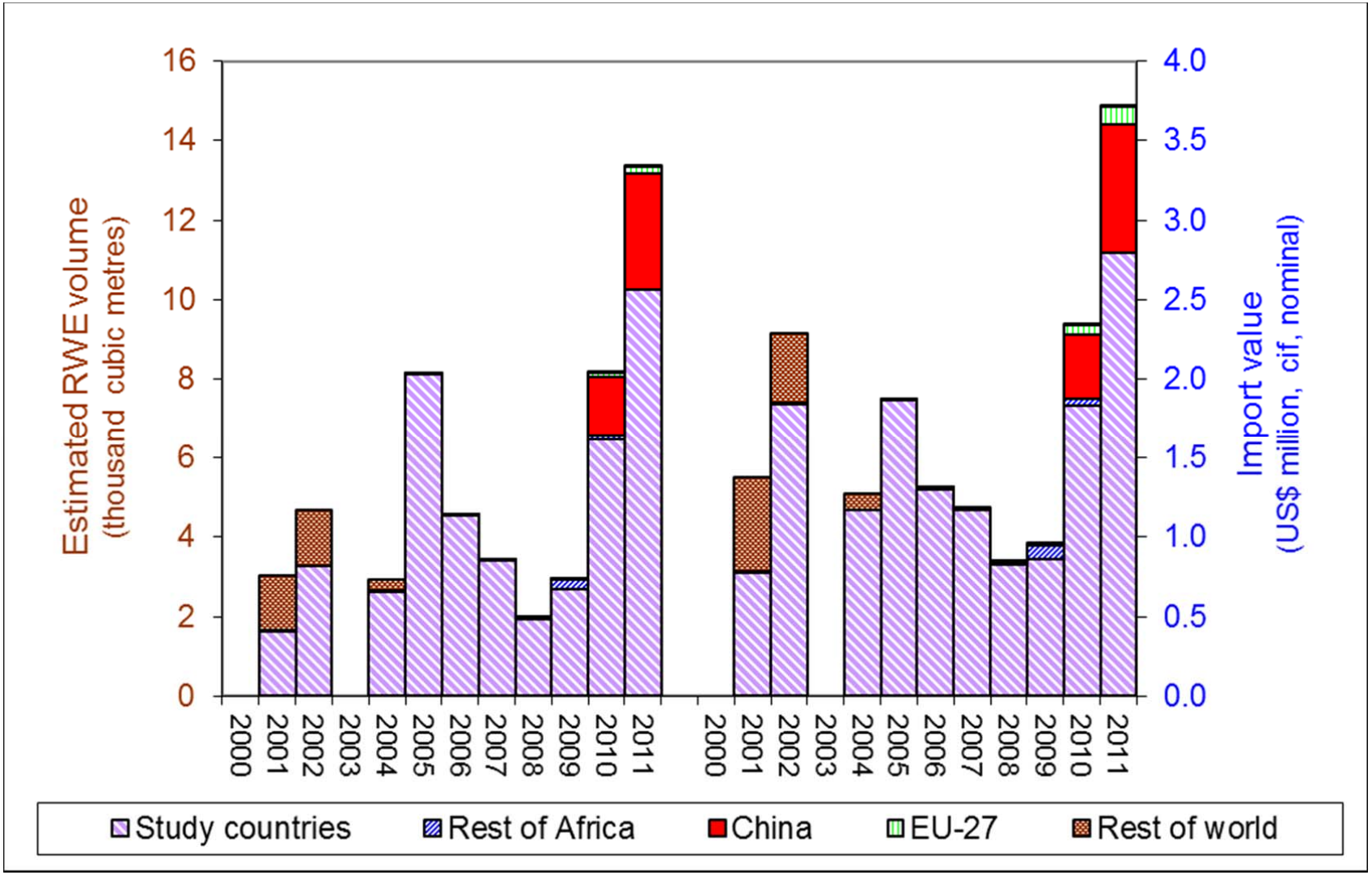


**Figure 64 Zimbabwe's Imports of VPA core products (2000-2011), by partner country/ Figure 64 Importations de produits de base APV du Zimbabwe (2000-2011), par pays partenaire**

**Source: Based on data provided by Zimbabwe and presented in UN Comtrade, 2012**

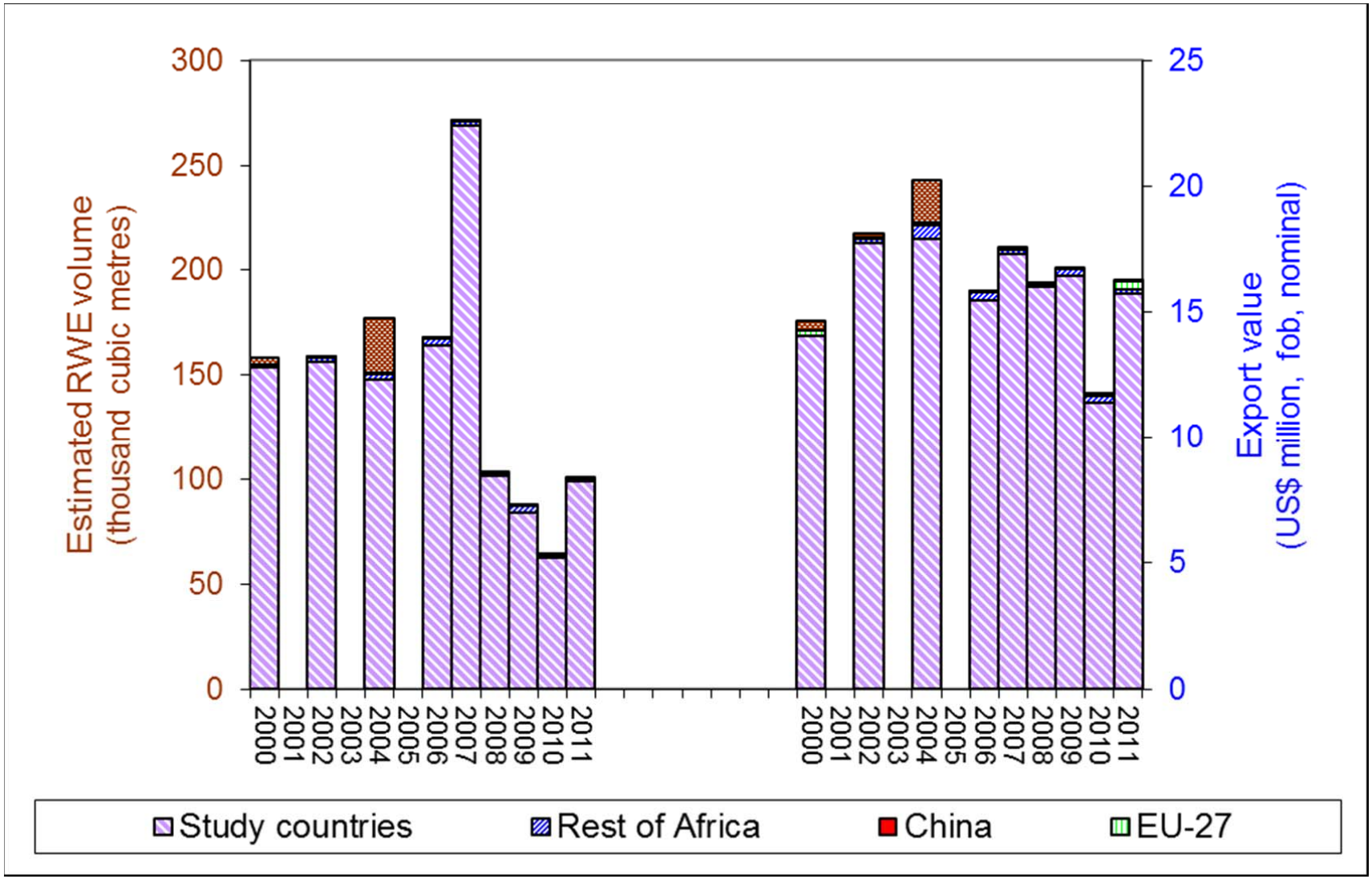


**Figure 65 Zimbabwe's Exports of VPA core products (2000-2011), by partner country/ Figure 65 Exportations de produits de base AVP du Zimbabwe (2000-2011), par pays partenaire**

**Source: Based on data provided by Zimbabwe and presented in UN Comtrade, 2012**

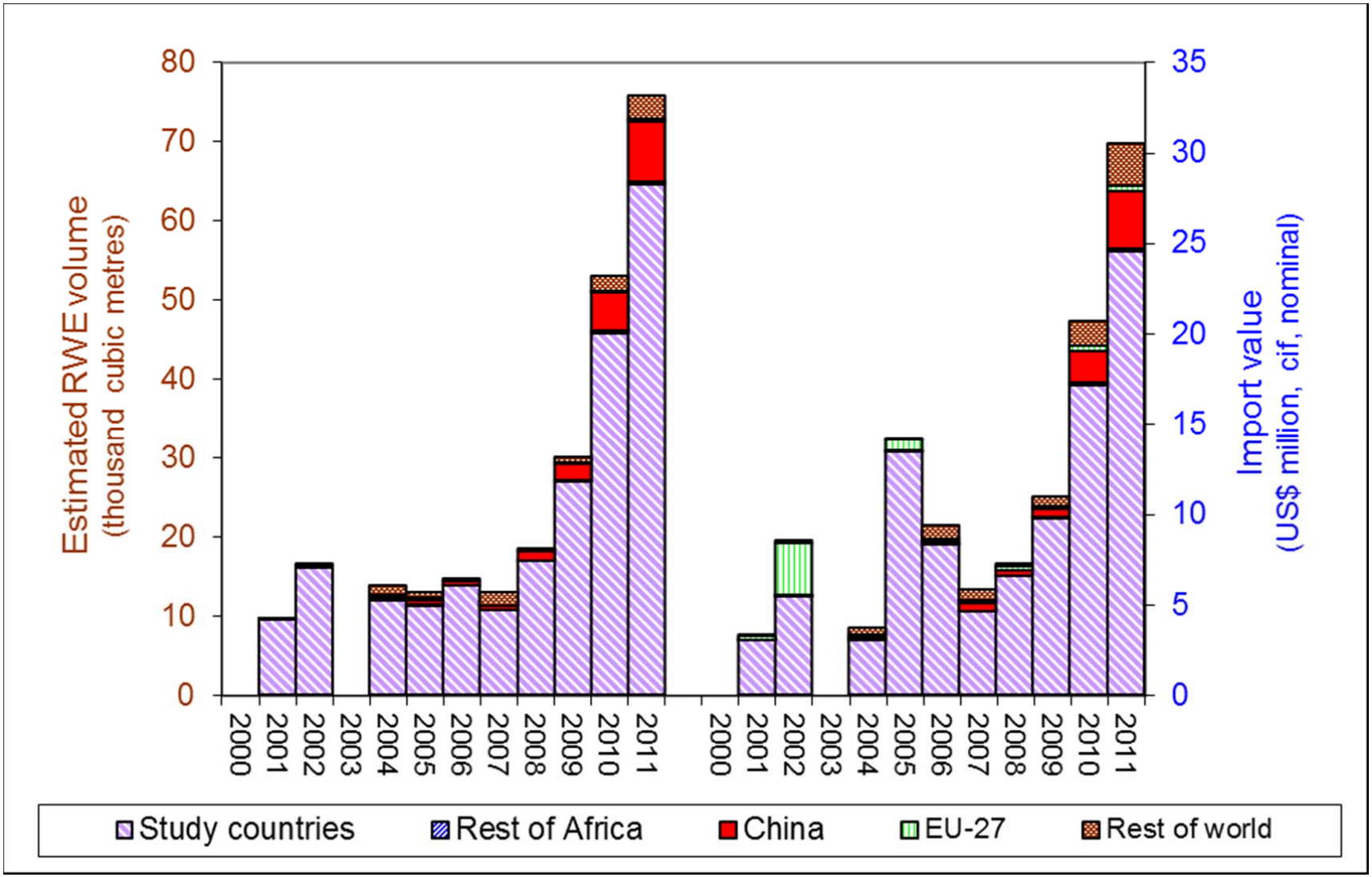


**Figure 66 Zimbabwe's Imports of other timber sector products (2000-2011), by partner country/ Figure 66 Importations d'autres produits du secteur bois du Zimbabwe (2000-2011), par pays partenaire**

**Source: Based on data provided by Zimbabwe and presented in UN Comtrade, 2012**

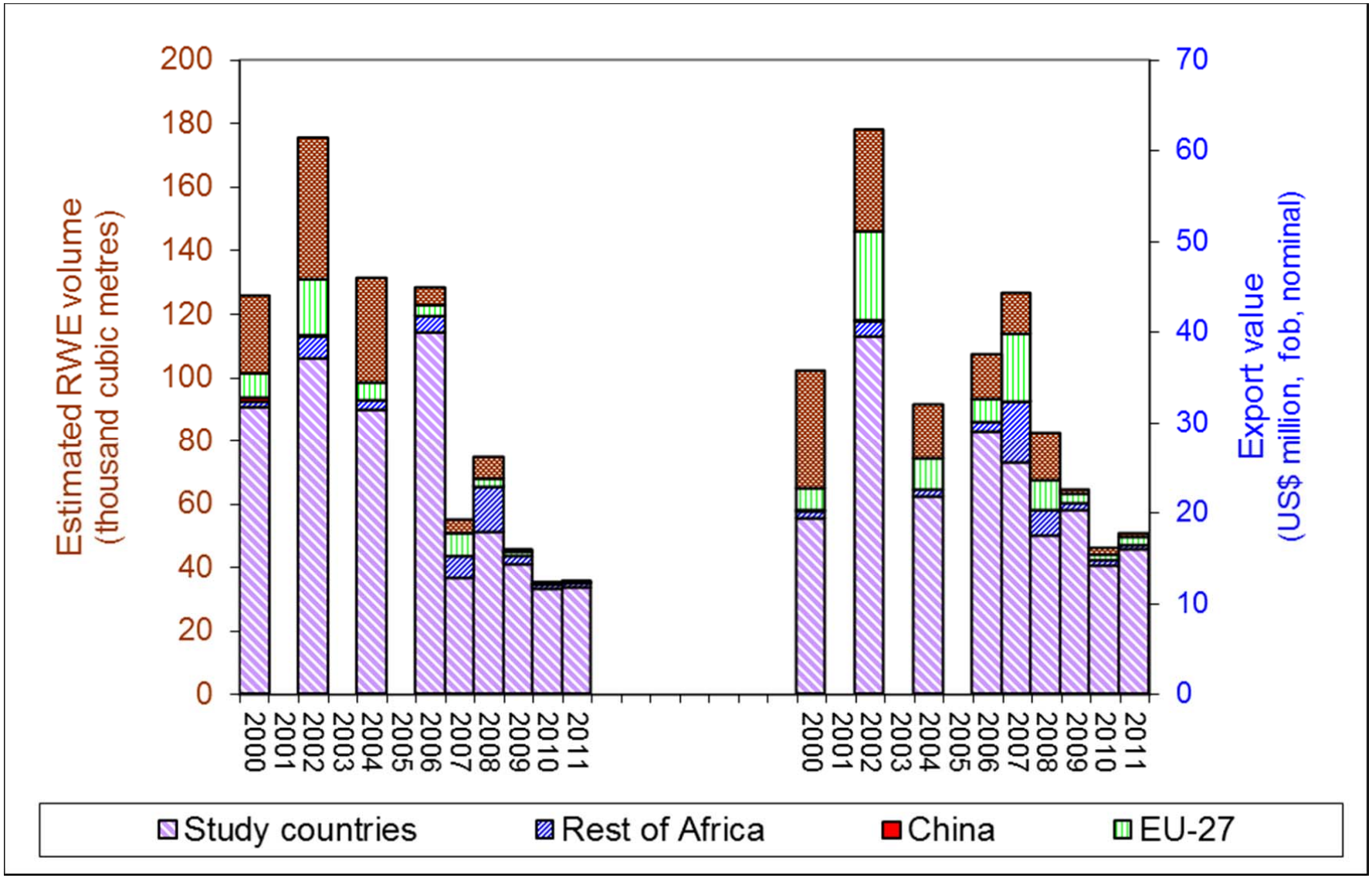


**Figure 67 Zimbabwe's Exports of other timber sector products (2000-2011), by partner country/ Figure 67 Exportations d'autres produits de secteur bois du Zimbabwe (2000-2011), par pays partenaire**

**Source: Based on data provided by Zimbabwe and presented in UN Comtrade, 2012**

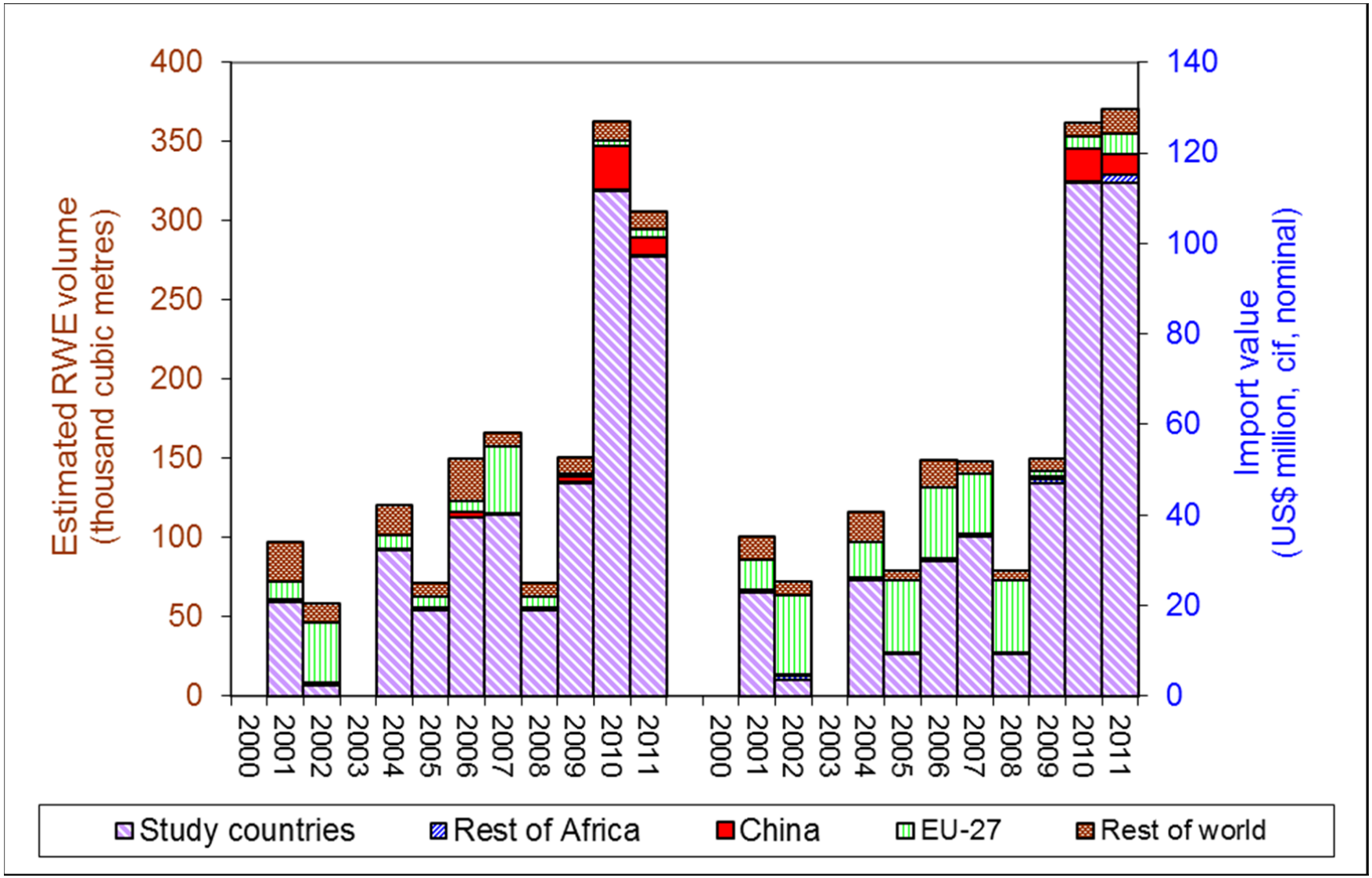


**Figure 68 Zimbabwe's Imports of paper sector products (2000-2011), by partner country/ Figure 68 Importations de produits du secteur papier du Zimbabwe (2000-2011), par pays partenaire**

**Source: Based on data provided by Zimbabwe and presented in UN Comtrade, 2012**

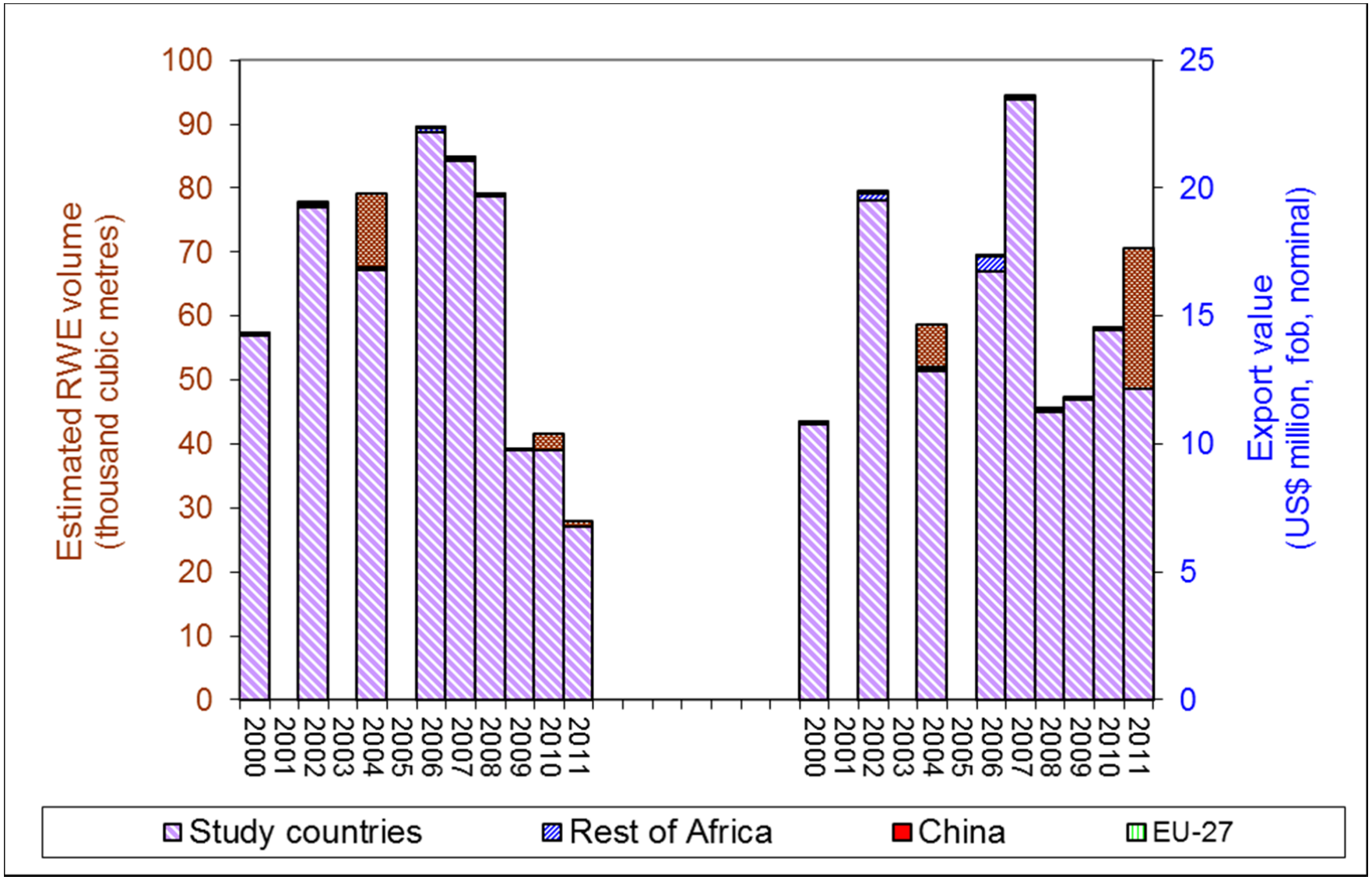


**Figure 69 Zimbabwe's Exports of paper sector products (2000-2011), by partner country/ Figure 69 Exportations de produits du secteur papier du Zimbabwe (2000-2011), par pays partenaire**

**Source: Based on data provided by Zimbabwe and presented in UN Comtrade, 2012**

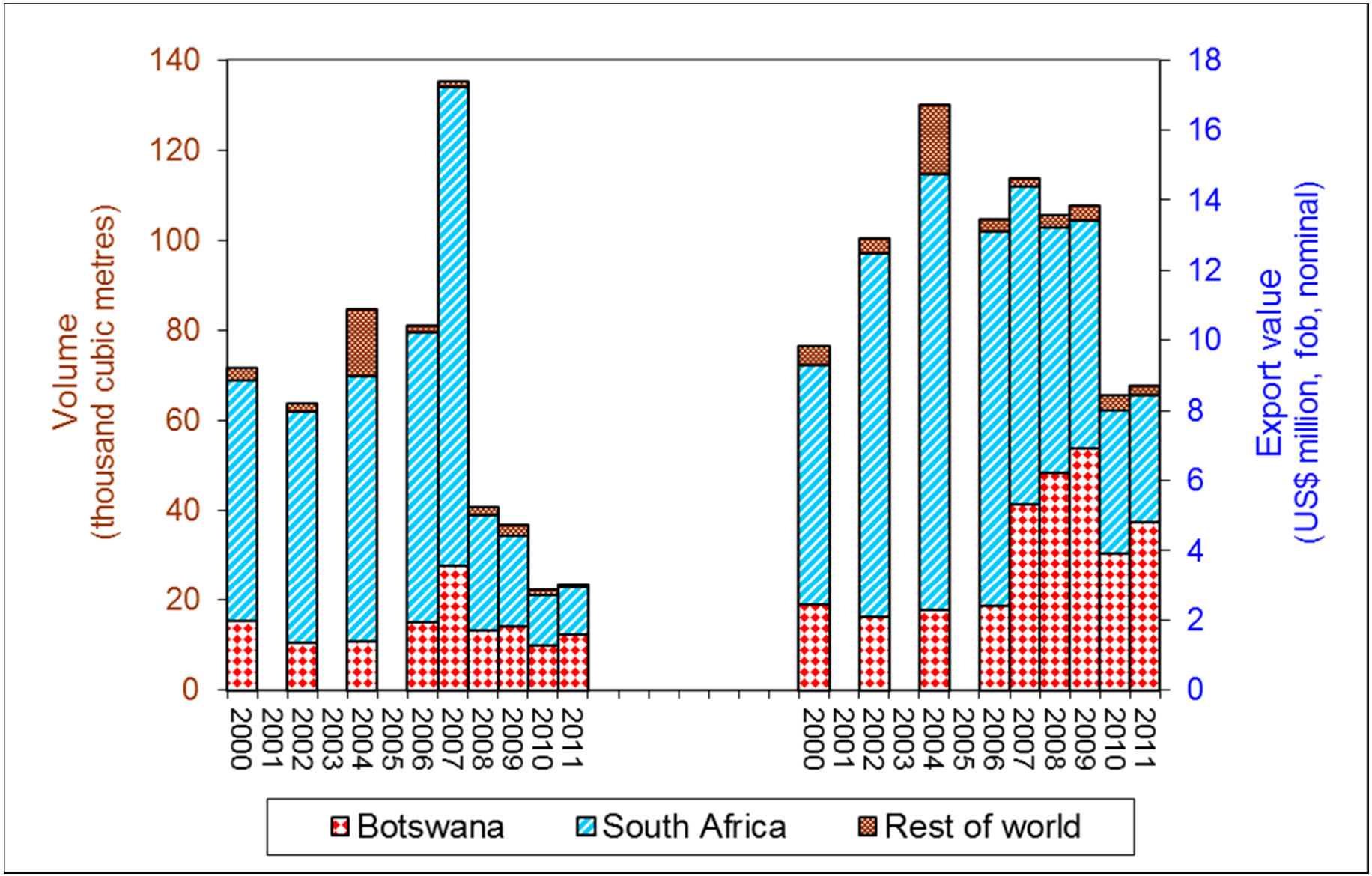


**Figure 70 Zimbabwe's Exports of sawn wood (2000-2011), by partner country/ Figure 70 Exportations de bois de sciage du Zimbabwe (2000-2011), par pays partenaire**
**Source: Based on data provided by Zimbabwe and presented in UN Comtrade, 2012**

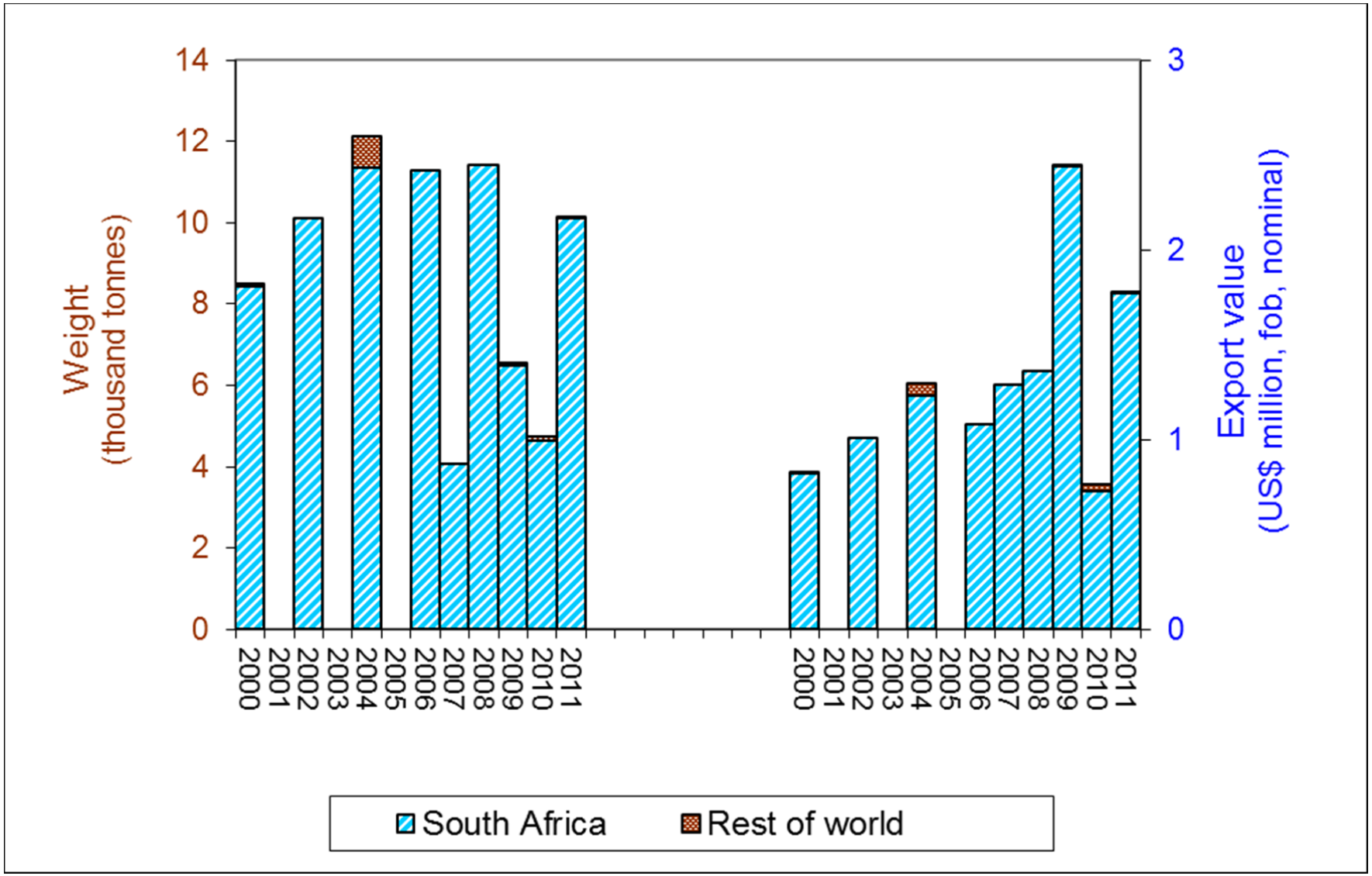


**Figure 71 Zimbabwe's Exports of charcoal (2000-2012), by partner country/ Figure 71 Exportations de charbon de bois du Zimbabwe (2000-2012), par pays partenaire**
**Source: Based on data provided by Zimbabwe and presented in UN Comtrade, 2012**

## Annex 19 List of References

This Summary Document is mainly based on detailed studies carried out during 2012 in 9 countries in Eastern and Southern Africa, having resulted in 9 separate and stand alone reports, as follows;


Timber Trade Flows within, to and from Eastern and Southern African Countries – Burundi Study

Timber Trade Flows within, to and from Eastern and Southern African Countries – Kenya Stu

Timber Trade Flows within, to and from Eastern and Southern African Countries – Madagascar Study

Timber Trade Flows within, to and from Eastern and Southern African Countries – Mozambique Study

Timber Trade Flows within, to and from Eastern and Southern African Countries – Rwanda Study

Timber Trade Flows within, to and from Eastern and Southern African Countries – South Africa Study

Timber Trade Flows within, to and from Eastern and Southern African Countries – Tanzania Study

Timber Trade Flows within, to and from Eastern and Southern African Countries – Uganda Study

Timber Trade Flows within, to and from Eastern and Southern African Countries – Zambia Study


In each of these reports, further references are found.


FAO; Global Forest Resources Assessment, Rome 2010

FAO; State of the World's Forests, Rome 2011

FAO; Forestry Outlook Study for Africa (FOSA), Rome, 2008

FAO/FLEGT – Forest Law Enforcement, Governance and Trade Support programme for African, Caribbean and Pacific Countries; Sharing Experiences on the FLEGT Process in the Eastern African Countries, Workshop Report, Nairobi, November 2012

Persson, Reidar; Assistance to Forestry – Experiences and Potential for Improvement. CIFOR, Bogor, 2003

Royal Swedish Academy of Agriculture and Forestry; Swedish-African Forestry Relations, Stockholm, 2010

SADC; SADC Regional Forest Law Enforcement, Governance and Trade (FLEGT) Programme Document, Gaborone, August 2012

## Annex 20 Terms of Reference

*Sector 11: ENVIRONMENT/CLIMATE/NATURAL RESOURCES/ENERGY DMP*
*279408*

TERMS OF REFERENCE

for

TIMBER TRADE FLOWS WITHIN, TO AND FROM EAST AFRICAN COUNTRIES

1. INTRODUCTION

The European Union (EU) and some other consumer markets are becoming increasingly sensitive about the environmental credentials of timber products, specifically their legal and sustainable production. The EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, initiated in 2003 put into motion a process and a series of measures to address illegal logging and the trade of illegal wood and paper products.

Voluntary Partnership Agreements (VPAs) are legally binding bilateral trade agreements to ensure that the EU and partner countries work together in support of the FLEGT Action Plan. All the timber products exported from FLEGT partner countries will be covered by FLEGT licenses. The exporting countries issue FLEGT licenses that attest to the legality of their exports and in turn, EU member states' border control agencies allow timber imports from those countries only if they are accompanied by a FLEGT license.

FLEGT Voluntary partnership agreements also include governance reforms and strengthening of law enforcement. A number of countries are already engaged in VPA negotiation or implementation. In Africa, Ghana, the Republic of Congo, Cameroon, Liberia and the Central African Republic have concluded VPA negotiations while Gabon and the Democratic Republic of Congo are presently negotiating a VPA.

2. CONTEXT

Knowledge about timber flows, volumes and values of forest products within the East African region and between East African countries and the rest of the world is essential for the understanding of the dynamics of timber trade flows in the region.

It is also useful to understand for each of the East and South African countries the role that timber trade plays in their national economy, and their potential interest in a VPA.

This study will provide a basis of information, data and analysis, which can potentially be used to design more effective strategies to prevent illegal logging and the trade of illegally harvested forest products, either between East African countries or exports from the region.

3. OBJECTIVES AND SCOPE OF THIS STUDY

The study has two parts:

1. Baseline timber trade flow information in the region
2. Overview and analysis of the regulatory framework for timber production, processing and trade in 9 countries

The first objective of this study is to provide a baseline for timber trade flow information within, from and to 11 countries of the East African region. This study will need to consider the entire East Africa region comprised of Botswana, Burundi, Kenya, Madagascar, Mozambique, Rwanda, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. It will provide an overview of the current trends in timber flows:

i) within and between those countries,

ii) from the region to other markets,

iii) from other regions to this region. Wherever feasible, the study will also provide anecdotal information on volumes of undocumented and illegal fellings and trade within the region.

The second objective is to provide specific country-level information that will be used in determining current and future potential to enter into FLEGT processes for these 9 countries: Burundi, Kenya, Madagascar, Mozambique, Rwanda, South Africa, Tanzania, Uganda and Zambia. (Note that Botswana and Zimbabwe are not included in this second objective.) The focus should be on the forest sector governance and the forest products industry.

4. ACTIVITIES

In submitting their offer, proponents will provide i) a methodological note of a maximum of 4 pages, ii) a detailed work plan and iii) a proposed schedule (timetable) to complete the activities.

After signature of the contract, the beneficiary of the contract will perform the following activities:

Activity 1. Participate in information briefing prior to work and presentation of the methodological note, the work plan and the schedule for approval

A kick off meeting will be organised with the European Commission staff to discuss about the methodological note, the work plan and the schedule. The European Commission will provide the beneficiary of the contract with in-country contacts in the EU Delegations, with contacts at European Forest Institute (EFI) and at the FAO, and different sources of information and relevant projects in addition to those already identified by the contractor.

Following this meeting, the beneficiary will review key documentation on FLEGT, will contact identified resource persons at EFI, Efeca Ltd and FAO and will adapt and fine-tune its methodological note, work plan and schedule, and present an inception note to the Commission before initiating further work. This inception note will include more information on identified sources of information for activity 2 and will propose a draft template for reporting on trade flows. It will also propose a draft template for reporting on country analysis, as mentioned in activity 3.

Activity 2. Baseline timber trade flow information

*Scope of the trade flow analysis*

Provide baseline regional timber trade flow information for East Africa including: Botswana, Burundi, Kenya, Madagascar, Mozambique, Rwanda, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. Analyze current and future projections and historical trends of timber product flows:

i) within the region,

ii) to main consumer markets outside the region (exports to EU-27, rest of Europe, United States, Japan, China, India, etc.)

iii) from other region to the different countries of the region (main imported products and origins).

This study should begin with a review of existing information, data, analyses and reports on timber trade flows in East Africa. Distinction should be made between timber producing countries, processing hubs (i.e. countries which import timber to add value (processing) and then export the processed products), and 'pure' consuming countries (countries which don't export timber products).

*Historical analysis (national figures)*

The intra-East Africa trade will be detailed at the country level, while for the destinations of timber outside Africa countries can be grouped by main relevant markets (for example EU-27, rest of Europe, United States of America, China, Japan, India, Vietnam, Malaysia, Indonesia, and rest of the world).

Figures should identify all origins, describing recent trends and potential evolution of timber sources.

Analysis should inform where physically the cross border flows take place (maps to be provided).

The consultant will provide a historical analysis from 2000 onwards, and include the most recent available data, e.g. for the past year. One of the challenges in this study will be to access current, high-quality data and information (on volumes, species, and types of products) at the national level and the need to validate trade statistics with different sources of statistics (national and international, formal and informal, global and partial). The information should be provided in both value (US$ and €) and volume ($m^3$ RWE) where available, rigorously citing the sources of information. The consultant will also estimate, whenever possible, the volume and value of uncontrolled/illegal timber trade between East Africa countries.

The consultant will collate and analyze trade statistics, drawing on existing information on key wood and paper products. The products should include primary-processed products, including :

- roundwood (industrial roundwood separated where possible into sawlogs, veneer logs,
- pulpwood and fuelwood),
- sawnwood (broken down into hardwood (non-coniferous) and softwood (coniferous)),
- panels (plywood, fibreboard, particleboard, etc.),
- pulp and paper, as well as
- secondary-processed/value-added products, including furniture, millwork, etc. as available.

*More specific qualitative analysis*

Where available, information on species and qualities/grades should be included. The focus will be on timber products produced and traded within the region and those imported from and exported to key consumer markets.

Where available, species and qualities/grades should be included.

The beneficiary of the contract will provide information on the source of timber (volumes coming from plantation or natural forest). The analysis will identify the main use of timber coming from plantations and the main use of timber coming from indigenous forests.

Given the importance of trade of CITES timber species in the region, special emphasis will also be made on CITES timber species trade. The origin of the data and the methodology used for their collection should be described, assessed and documented. Trade in CITES timber species, such as mahogany (Swietenia spp.), should be researched and reported as well. Some CITES species may not occur naturally in these countries, but they could be traded, i.e. imported and re-exported.

Trade in any products certified for sustainable and/or legal forest management should be clearly presented as well where available.

*Sources of information and data analysis*

Data and information should be drawn from existing official national data sources and from other sources such as Eurostat, ITTO, FAO, UNCOMTRADE, USDA Foreign Agricultural Service (FAS), etc. The information presented in the final report should be standardized (converted in value to US dollars and € and volume in cubic metres RWE). The consultant will provide an explanation on how the different collected values have been converted to the standardized ones (FOB to CIF, $m^3$ to kilograms/tons, local currencies to US dollars or €, etc) by stating conversion factors used and the sources of those conversion factors. The consultants will assess the credibility of in-country statistics, including their validity, timeliness, completeness, etc.

The consultant will analyse discrepancies between official export statistics from East African countries and corresponding imports by EU-27 (using Eurostat as the data source), United States (using FAS as the data source), etc. The consultant will provide the basis for validation of any discrepancies identified.

*Presentation*

The data should be presented in tables, graphs and map formats and supporting basic data provided logically in an annex. A series of maps of these countries with arrows indicating the direction and magnitude of trade flows is necessary.

A recommended methodology for periodic further monitoring of the baseline data should be provided. The consultant should contact the consultant, Efeca Ltd., responsible for the Independent Market Monitoring Methodology study, commissioned by European Forest Institute (EFI), which aims at developing a methodology to monitor timber trade from VPA countries, to analyze possible synergies between the two studies.

Activity 3. Overview and analysis of the regulatory framework for timber production, processing and trade in 9 countries

In order to determine current and future potential to enter into FLEGT processes, in-depth information is required at the country level for these 9 East Africa countries: Burundi, Kenya, Madagascar, Mozambique, Rwanda, South Africa, Tanzania, Uganda and Zambia. (Note that Botswana and Zimbabwe are not included)

3.1 For each East Africa country, the consultant will recap the analysis of timber trade (volume, value, product type, and species imported and exported by destinations) in a one page document (see activity 2).

3.2 Separately, wood fuel production and consumption should be investigated. If wood fuel statistics are not available, anecdotal evidence should be used to describe wood fuel use by individuals for heating and cooking, as well as wood-based fuels used industrially or possibly by municipalities. If any cross-border trade exists, that too should be described. If chips or processing or forest residues are exported, either for fuel or for pulp or panel manufacturing, an estimation of its importance should be included.

3.3 This activity of the study will focus on existing legality verification systems and will describe both documentary and field regulatory controls and roles of government agencies with authority over the supply chains for export timber and timber products, including monitoring, data collection, customs authorities and agencies. In particular this activity will detail the documentation requirements for timber exports between each East Africa country and will list all the agencies involved. Examples of all documents with explanatory notes should be collected whenever possible and included in the final report as annexes. The beneficiary needs to describe the legality verification procedures (theory, according to the legal framework, and real practice) in each country and describe the institutions in charge of legality verification. Anecdotal evidence of the effectiveness of legality verification will be provided when available.

3.4 The report should mention how timber products are traced within each country for legality and sustainability assurance. Customs procedures regarding timber exports records should be described, including legal requirements.

3.5 A brief, half-page description of each country's forest sector, obtained from the FAO Forests website and updated if needed, should be included and complement the trade analysis as mentioned under activity 3.1.

3.6 A description of the forest-based industry operating in the country, starting with fellings and

concluding with exporting companies, will be provided. The industry description should include how forests are harvested, i.e. by concessions, government workers, government contractors, private individuals, etc.. A description of the company structures can be provided if available (origin of capital). A description of how roundwood is transported to mills and to the ports should be provided. The processing facilities for sawing, peeling, and manufacturing of primary and secondary processed products should be described. This includes the types of companies (public and private), indication of their size (capacity (input and output), production, employees, turnover, etc.), their different types of activities, orientation toward domestic or export market, etc. A description of trade associations that are established in the forest sector should also be provided.

3.7 Certification of sustainable forest management and chain-of-custody certification are of interest; where these exist, they should be documented. If national or international certification schemes exist in the country, they should be described.

3.8 Legality and governance are critical components of FLEGT. Each country's legal framework for the forest sector should be briefly described, using the forest governance analysis methodology developed by the World Bank and the FAO as a reference. If they have a national forest policy and plan, they should be identified and links provided to the original documents. For this requirement the forest sector begins at the forest level and spans the entire sector until the wood and paper products are consumed domestically or exported. Hence, the current policies and legislation affecting the entire sector should be briefly described.

3.9 A brief description of the broader institutional framework should be provided : Which ministries and government departments at the national and sub-national levels are responsible for the forest sector or have influence on the sector? What is the stature within the government of the minister and ministry of forests or its equivalent? What are the current issues faced by government agencies, and are there any development plans or political ambitions related to the forest sector?

3.10 Finally, how are laws enforced via a national or local forest service and via the judiciary system? Based on findings the consultants should express an opinion about transparency in the forest sector.

3.11 Which other actors are important to the forest sector in each country? Identify active non-governmental organizations (NGOs). These include environmental as well as social NGOs.

The beneficiary of the contract will rely on information gathered in the various capital cities, however it is expected that the consultant will visit relevant points/areas in each country to validate the collected information (particularly at border points).

Activity 4. Midterm report submitted in written form and presented orally.

After the mission in three countries, and preparation of activity 1, a midterm report should be prepared and presented to the European Commission for comments. If needed, reorientation of the strategy for the visits in the 6 remaining countries will be discussed and agreed.

Activity 5. Preparation of a final report and oral presentation of the results of the study.

5. METHODOLOGY and REPORTS

The analysis will draw on expert knowledge, primary and secondary sources of information (data, statistics, etc), supported by consultation with key stakeholders and key data providers, including national forest agencies, forest industry, national wood and paper manufacturers/exporters associations, NGOs, bilateral organizations, commerce and customs organizations, and civil society. The consultant will also coordinate with CITES authorities to gather data on CITES trade.

Baseline information will be collated primarily from existing official sources and from any other referenced sources. All sources of information must be fully cited to enable their use in the future.

Local short-term (1 to 10 days) expertise may be recruited to help the consultants in the countries. A total amount of maximum 30 000 € should be included under the provision of reimbursable to finance this local short-term expertise. Prior approval of the European Commission will be needed for contracting this expertise.

*Meetings*

The beneficiary will have a briefing by the European Commission in Brussels before the country field visits, then for presentation of the midterm report and for presentation of the final report.

When visiting a country, the beneficiary of a country should inform the EU Delegation beforehand, and if required, have a short debriefing in the EU Delegation before leaving the country.

*Reports*

As mentioned in activity 1, an inception report will be provided by the consultant not later than 10 calendar days after the kick off meeting. It will provide a template for country analysis and timber trade flow information, to be agreed with the European Commission.

As mentioned in activity 4, a midterm report and its annexes will be submitted electronically in written form and orally presented to the European Commission (possibly through videoconference). It will include a literature review on the existing studies and findings available to date based on the activities described above. The midterm report and annexes will be sent after the desk study (activity 2) and the trip mission in 3 countries (activity 3) and before the trip missions in the last 6 countries. The European Commission will provide written comments within one week. If needed, reorientation of the strategy for the visit in the next countries will be discussed and agreed during that meeting as well as possibly structure of the final report.

As mentioned in activity 5, a draft final report and its annexes will be submitted to the European Commission and orally presented at the end of the study. This report will include all study results (e.g. thematic analysis, statistical analysis, secondary data analysis, etc) based on a systematic examination of the existing information, and where appropriate, anecdotal information to complete activities 2 and 3. The draft final report will also make recommendations for additional fact finding activities. Comments by the European Commission will be made to the consultants within a period of maximum 3 weeks. The consultants will then have an additional period of 2 weeks to take into account these comments, modify and fine-tune their report and send the final report.

*Structure of the report*

The final report will not exceed 25 pages, including a one page executive summary in French and in English, plus annexes. It will highlight the results of Activities.

The report will identify key strengths and weaknesses and will suggest key challenges related to forest governance and forest verification systems.

The final report will contain:

1. An overview of timber trade within the East Africa region, to and from the region with outside markets, including flows, volumes, values, and product type of legal timber trade. Undocumented/illegal timber trade should be estimated.
2. An analysis of timber trade flow trends within the region, to the region and from the region to outside markets, for the past ten years and for its potential future evolution.
3. For each targeted countries country, a summary and a 5 to 10 page annex which will cover all

areas specified in chapter 4 of these terms of reference. These specific annexes will be provided to each relevant EU Delegation for comments.

The final report will take into account comments provided by the European Commission on the draft final report.

The final report should be written in English with an executive summary in both English and French. All tables, maps and graphs should include titles in English and French. When an annex is specific to a country, it could be prepared in the language of that country, with key titles and labels for tables, graphs and maps in both English and French.

The deliverables can be presented in one report, with annexes containing supporting information. Sources and references need to be included and within the text there needs to be complete, systematic citations of sources of the information, data and statistics.

The final report will be submitted in electronic version (MS Word and PDF format), as well as in 15 paper copies, in colour. When preparing graphs, figures and maps, attention should be paid to the colours and patterns selected because some figures may be photocopied in black and white, necessitating their legibility.

## 6. EXPERTS' PROFILES

This mission requires a team of international experts with one team leader. The team leader will be a senior expert. Other experts can be senior or junior experts.

The firm can choose the number of experts involved in this study and will propose and explain his choice in the methodological note (total number of days provided below is to be respected).

The firm will identify who is the team leader.

Essential requirements for the team leader (senior expert):

- University degree (graduate or post-graduate) in forest products marketing, forestry, environment, economics, social sciences, agriculture or in other relevant areas directly linked to the mission
- A minimum of 10 years of experience of forestry and environmental issues, including institutional aspects and forest policies
- A minimum of 5 years of experience in the East African region
- Fluent in English (reading, speaking and writing) and or French and have a working knowledge of English.
- Excellent analytical and communication skills
- Ability to produce rapidly high-quality reports
- Ability to understand the interrelated socio-economic, political, environmental and economic challenges of the East African countries
- Ability to do field work, to understand and to communicate with these countries
- Ability to function in an international team.

Desirable requirements

- Experience in trade of timber and wood products, directly or indirectly is an asset

Essential requirements for the experts:

- University degree (Graduate or Post-graduate) in forest products marketing, forestry, environment, economics, social sciences, agriculture or in other relevant areas directly linked to the mission

- A minimum of 3 years of experience of forestry and environmental issues in tropical areas, including institutional aspects or forest policies or timber verification systems or statistics.
- Excellent analytical and communication skills.
- Ability to function in an international team
- Language requirements
    - o Experts planned for field work in Rwanda, Burundi and Madagascar should be fluent in French (reading, speaking and writing) and have a working knowledge of English o Experts planned for field work in Mozambique should be fluent in Portuguese (reading, speaking and writing) and have a working knowledge of English o Other experts should be fluent in English, while having a working knowledge of French will be an asset (reading, speaking and writing). o Country allocation by expert should be made based on country knowledge and linguistic skills.
- Complementarities of the experts is an asset.

Together with the CVs, the consortium will provide a methodological note, not longer than 4 pages explaining the methodology they intend to follow for this study, a detailed work plan and a schedule (timetable). These documents will be adapted after the kickoff meeting and Activity 1, and will form an inception note, to be given for approval to the European Commission before beginning further work.

Number of working days for the senior experts: 52 working days
Number of working days for junior experts: 148 working days

7. DURATION AND LOCATION

The study should be completed at the latest 9 (nine) months after the contract has been signed.

For Activity 2, the consultancy will be desk-based with contacts with local stakeholders.

For activity 3, the consultancy will begin with desk-based contacts with local stakeholders. Then missions will take place in the 9 countries of East Africa, with a presence in each country of approximately 10 working days.

8. WORKPLAN AND TIME SCHEDULE

Indicative starting date: March 2012

| Task | Location | Working days for senior expert | Working days for junior experts |
|---|---|---|---|
| Activity 1. Kick-off meeting in Brussels with relevant European Commission staff. Review of key documentation. Preparation of an inception note (including template report) and preparation of the country visits. Meetings with European Commission officers. | Brussels | 5 | 10 |
| Activity 2 baseline timber trade information | Desk-based | 5 | 30 to 32 |

| | | | |
|---|---|---|---|
| Activities 2 and 3. Work in the 3 first countries, including briefings/debriefings with EU country-based delegations, forestry administration, customs administration, private sector, civil society and other stakeholders. Includes travel in the countries and travel between countries. Includes drafting of country annexes, the midterm report and pre-drafting of the final report. | 3 East Africa countries | 10 | 30 |
| Activity 4. Submission of midterm report. Debriefing with the European Commission. | Brussels | 1 | lto3 |
| *Comments of the European Commission one week after the meeting* | | | |
| Activities 2 and 3. Work in the 6 following countries, including briefings/debriefings with EU country-based delegations, forestry administration, customs administration, private sector, civil society and other stakeholders. Includes travel in the countries and travel between countries. Includes drafting of country annexes and of the final report. | 6 East Africa countries | 18 | 60 |
| Activity 5. Finalisation of the draft final report. | Desk-based | 9 | 10 |
| Presentation of the final report at the European Commission | | 1 | 3 |
| *Comments of the European Commission within three weeks after the meeting* | | | |
| Activity 5. Incorporating comments from the European Commission to the report, submission of final report (not later than five weeks after submission for the draft report). Oral presentation of final report. | Brussels | 3 | 2 |
| Total number of working days | | 52 | 148 |

The consultants will, in collaboration with the European Commission in Brussels, inform the EU country-based delegations and appropriate authorities beforehand of their travel schedule.

9. ANY OTHER BUSINESS

The European Commission will not provide transportation or assistance in the countries. The consultant will be autonomous.

Together with the CV, the consultant will provide a methodological note, not longer than 4 pages explaining the methodology they intend to follow for this study. Primary views on how to deal with local short-term expertise, although not contractual, will also be part of the note.

Consultants will clearly state that they work for a study financed by the European Commission, but that their opinion does not reflect the opinion of the European Commission.