

INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PROJECT PROPOSAL

TITLE:	THE TRENDS OF CHINESE WOOD PRODUCT MARKETS AND THEIR DEPENDENCE ON INTERNATIONAL TRADE OF TROPICAL TIMBER TOWARDS <u>2030</u>
SERIAL NUMBER:	PD 858/17 <u>Rev.1</u> (M)
COMMITTEE:	ECONOMICS, STATISTICS AND MARKETS
SUBMITTED BY:	GOVERNMENT OF PEOPLE'S REPUBLIC OF CHINA
ORIGINAL LANGUAGE:	ENGLISH

SUMMARY:

This project is a follow up to ITTO PD 480/07 Rev.2 (M): "Demand and Supply of Tropical Wood Products in China towards 2020". With the rapid development of economy and urbanization, China's demand for wood products is increasing dramatically and its potential is great in future. Meanwhile, along with the progress of integrative global economy, Chinese wood products market has become an important part of international wood products market. At present, China is in a critically transitional period, for forest sector, it is experiencing a historic shift from a focus on timber production to ecological improvement. Think international, illegal logging has come into the spotlight of global forest policy, some environmental policy have profound impacts on China's exports of manufactured wood products. Therefore, it is of great significance to analyze and forecast the trends of Chinese wood product markets and their dependence on international trade of tropical timber in future. The project aims to give a whole picture of the direction of Chinese tropical wood market through capacity building of researchers, in-depth investigations on traders and processors of tropical wood products, strategic policy analysis of long term demand for wood, consumers' preference and taste shift, and dissemination of market information. This project aims to provide reliable information on China's tropical forest products markets which could be used as reference either by tropical log exporting countries in making market strategies or by domestic related authorities in making policy decisions, so as to promote close cooperation between ITTO producers and consumers and contribute to sustainable development of the global tropical wood product market.

EXECUTING AGENCY: THE RESEARCH INSTITUTE OF FORESTRY POLICY AND INFORMATION, CHINESE ACADEMY OF FORESTRY (CAF)

DURATION: 24 MONTHS

BUDGET AND PROPOSED SOURCES OF FINANCING:

SOURCE	CONTRIBUTION IN US\$
ITTO	<u>328,608</u>
CAF	<u>209,260</u>
TOTAL	<u>537,868</u>

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PROJECT BRIEF

This project is a follow up to ITTO PD 480/07 Rev.2 (M): "Demand and Supply of Tropical Wood Products in China towards 2020". Meanwhile, the project is also based on the experience gained in previous ITTO-financed projects, including PD 25/96 Rev.2 (M): "China's Consumption of Forest Products and Its Demand for Them from the International Tropical Forest Products Market by the Year 2010", PD 55/99 Rev.1 (M): "Establishment of Sustainable Tropical Forest Products Information System in China", and PD 171/02 Rev.4 (M): "Transparency in Trade Flows and Distribution of Tropical Wood Products in China". These projects have provided the foundation for design this project, based on the lessons learned and good relationships with stakeholders.

The key problem identified by the project is the lack systematic analysis on updated dynamics of supply and demand, direction of forest product market in China with focus on tropical timber, with the resulting consequences of the low transparency in tropical wood products market in China which has a negative impact on sustainable development of international trade.

The development objective of the project is to increase the transparency of tropical wood products market in China and promote sustainable development of global wood products trade. The achievement of this objective will be measured by the increased proportion of certified or legal verified wood products in the market, raised public awareness of legality and sustainability, reduced trading conflicts, and narrowing the gap between supply and demand of wood products.

The specific objective of the project is to analyze the dynamics and direction of forest products markets in China, and forecast their dependence on international trade of tropical timber towards 2030. The achievement of this objective will be measured through accurate forecast on situation of demand and supply of China's tropical wood products by 2030, improved consultation framework among stakeholders, and optimized trade flow of tropical wood products.

In order to promote the development of international tropical forest product markets and satisfy domestic market demand for tropical wood products, the project will pay equal attention to domestic policies and international policies shaping forest products markets. The project will study not only demand, supply and production within the Chinese tropical forest product markets but also the position of China's demand and imports within the global tropical forest product markets. In order to improve the forecasting accuracy, appropriate univariate and multivariate statistical techniques will be applied in the project, and economic model will be set up to ensure the objective, accurate forecasting results of the degree of dependency on international trade of tropical timber. Meanwhile, literature review, market analysis and strategic analysis will be performed during implementation of the project. In addition, participatory method will be adopted and consultative mechanism will be carried out with stakeholders. It is necessary to ensure outputs more practical, objective and feasible.

After project completion, through publishing research reports and various kinds of materials, expanding the exchange network of international forest product information, it will be greatly enhanced for stakeholders to understand the production, demand and trade dynamics of Chinese tropical wood products market and its direction in future. This will create better conditions for achieving the balance between supply and demand and sustainable cooperation between China and producing and consuming countries of tropical timber.

With regards to sustainability, the project will liaise with government agencies and other civil society organizations to continue to provide support for the manufacturers and traders of tropical wood products beyond the lifespan of the project. Meanwhile, experiences from the project will be shared with local and international partners and all relevant networks to continue to support the capacity building for statistical data collection and verification, forecasting model building and application in forest sector. The members of the project team will continue to make great efforts to create opportunities to disseminate the project results, with the goal of improving the accuracy of statistical data and the transparency of wood product market in China. In addition, the capacity of the ITTO supported Tropical Forest Product Information and Consultation Center of China will be further enhanced through the project, its resource and information base will expand, its links with stakeholders will also become closer and closer. All these will lay a good foundation for future following up research on market of tropical wood products in China.

This project will involve collaboration with many domestic and international institutions and there are risks of failed or delayed cooperation. Fortunately for the data and information collection there is more than one possible source so the risk of delay or failed collaboration can be mitigated. For the sake of timely accomplishment of the planned objectives the project will require collaboration from domestic departments such as industrial associations, major forest product producing enterprises and trade companies as well as major forest product markets and trade ports. The project will also need the support of Chinese government organizations in order to collect materials. The risks of failure in this respect can be mitigated as the project executing agency has established good cooperation relationships with relevant bodies through previous projects in this field. Therefore, no major risk is foreseen.

The project has a total budget of US\$ 537,868. The executing agency will provide a total of US\$ 209,260, with the remaining US\$ 328,608 to be contributed by ITTO.

LIST OF ABBREVIATIONS AND ACRONYMS

CAF	Chinese Academy of Forestry
CFCC	China Forest Certification Council
CINFT	Center for International Forest Product Trade
CNFPIA	China National Forest Products Industry Association
CTWPDA	China Timber & Wood Products Distribution Association
FSC	Forest Stewardship Council
GAC	General Administration of Customs
GDP	Gross Domestic Product
ITTO	International Tropical Timber Organization
MOC	Ministry of Commerce
NBS	National Bureau of Statistics
NGOs	Non-governmental Organizations
RIFPI	Research Institute of Forestry Policy and Information
SFA	State Forestry Administration
SFM	Sustainable Forest Management

MAP OF PROJECT AREA



PART 1. PROJECT CONTEXT

1.1 Origin

With the rapid development of economy and urbanization, China's demand for wood products is increasing dramatically and its potential is great in future. Meanwhile, along with the progress of integrative global economy, Chinese wood products market has become an important part of international wood products market. In recent years, with increasing labor force cost in China, some global wood products manufactures are gradually transferring their wood manufacture in China to other countries such as Vietnam and Laos. With intense international competition, China wood products manufacturers have to change their development strategy, it is estimated that new domestic forest industrial structure will be established during the Thirteenth Five-Year Development Plan (2016-2020), which will result in the great changes in market structure of forest products in China. In addition, with the new trends of international trade of forest products, such as Lacey Act and EU timber regulation, Chinese forest industry faces severe challenges from export market. It is necessary to continue to trace the perception and responses within the Chinese wood manufacturing sector and future trends, so as to understand the direction of China wood products market better in the background of ever-changing global market. Therefore, follow-up study on dynamics and direction of Chinese wood market is very much needed.

At the policy level, China is in a critically transitional period, for forest sector, it is experiencing a historic shift from a focus on timber production to ecological improvement. Forestry must meet not only the diversified demand of social for timber and other wood products but also the need for ecological improvement and safeguarding national ecological security in China. Ecological demand has become a priority of society from forestry in China. According to State Forestry Administration (SFA), China will push forward its Natural Forest Protection Program and phase out all commercial logging of natural forests by the end of 2017. Meanwhile, China has planned 14 million hectares of strategic timber reserves, most of which are located in the south (including tropical areas of Guangxi, Guangdong and Yunnan provinces), while in five to eight years they could increase timber supply by 95 million cubic meters, which will help fill the gap after the ban on commercial logging of natural forests. Therefore, the structure of wood supply will change a lot in China in future.

In addition, more and more countries started to restrict or prohibit exporting tropical logs, the voice combating illegal logging and trade is becoming stronger and stronger. The total import volume of tropical log decreased 10% in 2015 than that in last year. As the largest production and export country of furniture, plywood and wooden flooring in the world, the gap between supply and demand for timber is becoming bigger and bigger. It is necessary for Chinese government to take effective measures to readjust the development of forest industry in the context, and make great effort to reach the balance between supply and demand of wood products market. Meanwhile, China is developing its own Legality Verification Scheme, both from government perspective and the private sector. The national forest certification-CFCC (China Forest Certification Council) had been endorsed by PEFC in 2014. As of the end of 2016, the area of CFCC certified forest reached 9.1 million hectares.

It is obvious that great changes have taken place in wood products market of China. It is necessary to get clear understanding of the situation and future trend of supply and demand of wood products market, so as to provide bases to the relevant authorities for their decision making, as well as provide important market information to ITTO member countries. Therefore, as a follow up of the ITTO project ITTO PD 480/07

Rev.2 (M): "Demand and Supply of Tropical Wood Products in China towards 2020", the project will study the factors which influence domestic consumption and export of tropical wood products in the new era and forecast the direction of tropical wood products market and their dependence on international trade of tropical wood products. The outputs of the project will not only provide references to domestic authorities for making policies on wood supply and forest industry development, but also provide reliable market information to ITTO producer and consumer countries for making sound marketing strategies, which will help to facilitate close cooperation between China and other ITTO member countries, and ultimately promote sustainable development of international trade of tropical wood products.

1.2 Relevance

1.2.1 Conformity with ITTO's objectives and priorities

The project directly contributes to the overall objective of **ITTA** which aims at combating illegal logging and associated trade, promoting trade in timber and wood products from sustainably managed forests, as described below:

- **Objective d: Enhancing the capacity of members to implement strategies for achieving exports of tropical timber and timber products from sustainably managed sources;**

The project will promote **government agencies and manufacturers to develop** strategies for achieving imports of tropical timber products from sustainably managed sources **through conducting activity 2.1-2.6.**

- **Objective e: Promoting improved understanding of the structural conditions in international markets, including long-term trends in consumption and production, factors affecting market access, consumer preferences and prices, and conditions leading to prices which reflect the costs of sustainable forest management;**

The project will promote improved understanding of international market conditions and consumer preferences **through conducting activity 1.1-1.5, activity 3.1-3.4, activity 4.1-4.4 and activity 5.1-5.3.**

- **Objective k: Improving marketing and distribution of tropical timber and timber product exports from sustainably managed and legally harvested sources and which are legally traded, including promoting consumer awareness;**

The project will improve marketing and distribution of tropical timber and timber product from sustainably managed forests **through conducting activity 6.1-6.4.**

Moreover, this project aims to provide an effective framework for consultation, international cooperation and policy development among all members with regard to all relevant aspects of the world timber economy, which is consistent with the priorities established in the ITTO **Strategic** Action Plan (2013 – 2018). The main aspects considered in the proposal are as follows:

- **Strategic priority 1. Promote good governance and enabling policy frameworks for strengthening SFM and related trade and enhancing SFM financing and investment**

The project will promote legal timber trade in domestic and foreign markets **through conducting activity 2.1-2.6.**

- **Strategic priority 2. Increase the contribution of tropical forests to national and local economies, including through international trade**

The project will improve market intelligence with a view to ensuring greater transparency in the international timber market, and will contribute to raise the social responsibility and business skills of manufacturers **through conducting activity 2.1-2.6 and activity 5.1-5.3.**

- **Strategic priority 4. Reduce tropical deforestation and forest degradation and enhance the provision of environmental services**

The project will improve knowledge on environment-related trade policies to promote sustainable forest management in tropical areas **through conducting activity 6.1-6.4.**

- **Strategic priority 5. Improving the quality and availability of information on tropical forests, forest product markets and trade**

The project will provide updated information on market demand, thus promoting sustainable trade of wood products at the national and international levels **through conducting activity 1.1-1.5, activity 3.1-3.4, activity 4.1-4.4, activity 5.1-5.3 and activity 6.1-6.4.**

1.2.2 Relevance to submitting country's policies

In recent decades China has experienced substantial forest reforms that aim to protect important forested lands while simultaneously increasing timber outputs from plantations. Multiple green growth oriented programs have been in place to attain these objectives with the anticipation that rural poverty can be alleviated and the vulnerability towards natural disasters can be avoided. The forestry policy focuses on dealing well with the relationship between economic effectiveness and ecological environment to promote sustainable forest management in China. China now has 198 million hectares of natural forests, State Forestry Administration (SFA) announced a three stage plan to phase out all commercial logging in natural forests by the end of 2017. It is estimated over 40 percent of China's timber demand will still have to be met by imports by 2020. Many timber manufacturers seek for timber suppliers in foreign countries, especially the tropical timber. China has involved in global wood products trade more and more and became an important member of international wood products market. Therefore, the project is consistent with the requirements of forestry policies.

The latest thirteenth five-year plan (2016-2020) for forestry development focuses on forestry modernization, including accelerating forest management reform to promote SFM, protecting forest resources to ensure ecological safety, establishing national strategic timber reserves to improve wood supply, optimizing the forest industry structure to increase industry's competitiveness etc. At the same time, the thirteenth five-year plan attaches importance to forestry industry, the objective of forest industry development by 2020 is that a relative developed forest industry system will be established with large scale, diversified products, optimized distribution, high quality and efficiency, strong competition. The project will contribute to achieve the objectives above-mentioned.

It is a fact that the awareness of sustainable forest management, combating illegal logging has been raising, people pay more attention to environmental protection. China has been subjected to criticism and censure from some NGOs for its imports of great deal of timber, especially tropical timber from foreign countries. Facing these challenges, Chinese government take active part in international initiatives such as EU-FLEG to improve marketing and distribution of tropical timber and timber product exports from sustainably managed and legally harvested sources and which are legally traded. China is developing its own Legality Verification Scheme, both from government perspective and the private sector through Cross-sectoral coordination and multi-stakeholder participation. One is China Timber Legality Verification Scheme (CTLVS) led by the government, the other is voluntary China's Timber Legality Verification Standard led by China National Forest Products Industry Association (CNFPPIA). At the same time, the guideline of developing forest resources in foreign countries has been established and implemented in order to regulate overseas forest enterprises' forest exploitation. The project contributes to improve the transparency of Chinese wood products markets, which is also consistent with policies on wood legality.

1.3 Target area

1.3.1 Geographic location

The project will be in the whole country of China, with special attention to main production areas, processing areas and consuming areas of tropical timber and wood products in China. The detailed information is bellows:

- Main production areas of tropical timber: China's tropical forests are mainly distributed in four provinces (autonomous regions), including Yunnan, Guangdong, Guangxi and Hainan provinces in southwest China **(see red part in the figure below). The detailed information for the 4 provinces (autonomous regions) is showed in table 1.**



Figure 1 Geographic location of main production areas of tropical timber in China

Table 1 Geographic location of main production areas of tropical timber in China

<u>Province</u>	<u>Provincial capital</u>	<u>Land area (1000 km²)</u>	<u>Population (million)</u>	<u>Geographic location</u>		<u>GDP per capita (USD \$)</u>
				<u>East longitude</u>	<u>Northern latitude</u>	
<u>Hainan</u>	<u>Haikou</u>	<u>35.4</u>	<u>9.17</u>	<u>108°62'-111°10'</u>	<u>18°17'-20°17'</u>	<u>6485</u>
<u>Guangxi</u>	<u>Nanning</u>	<u>236.7</u>	<u>48.38</u>	<u>104°26'-112°04'</u>	<u>20°54'-26°24'</u>	<u>2683</u>
<u>Guangdong</u>	<u>Guangzhou</u>	<u>179.7</u>	<u>109.99</u>	<u>109°39'-117°19'</u>	<u>20°13'-25°31'</u>	<u>10704</u>
<u>Yunnan</u>	<u>Kunming</u>	<u>390.0</u>	<u>45.97</u>	<u>97°51'-106°18'</u>	<u>21°13'-29°25'</u>	<u>4757</u>

Data source: China Statistical Yearbook (2016)

- Main processing areas of tropical wood products (mainly plywood, flooring and wooden furniture): Tropical plywood manufacturers are mainly concentrated in Guangdong, Guangxi, Shandong, Jiangsu and Zhejiang provinces. Most of manufacturers to produce solid wood furniture and flooring using tropical logs are located in Guangdong, Zhejiang provinces and Shanghai city **(see blue part in figure below)**. **The detailed information for the 6 provinces (municipality) are showed in table 2.**

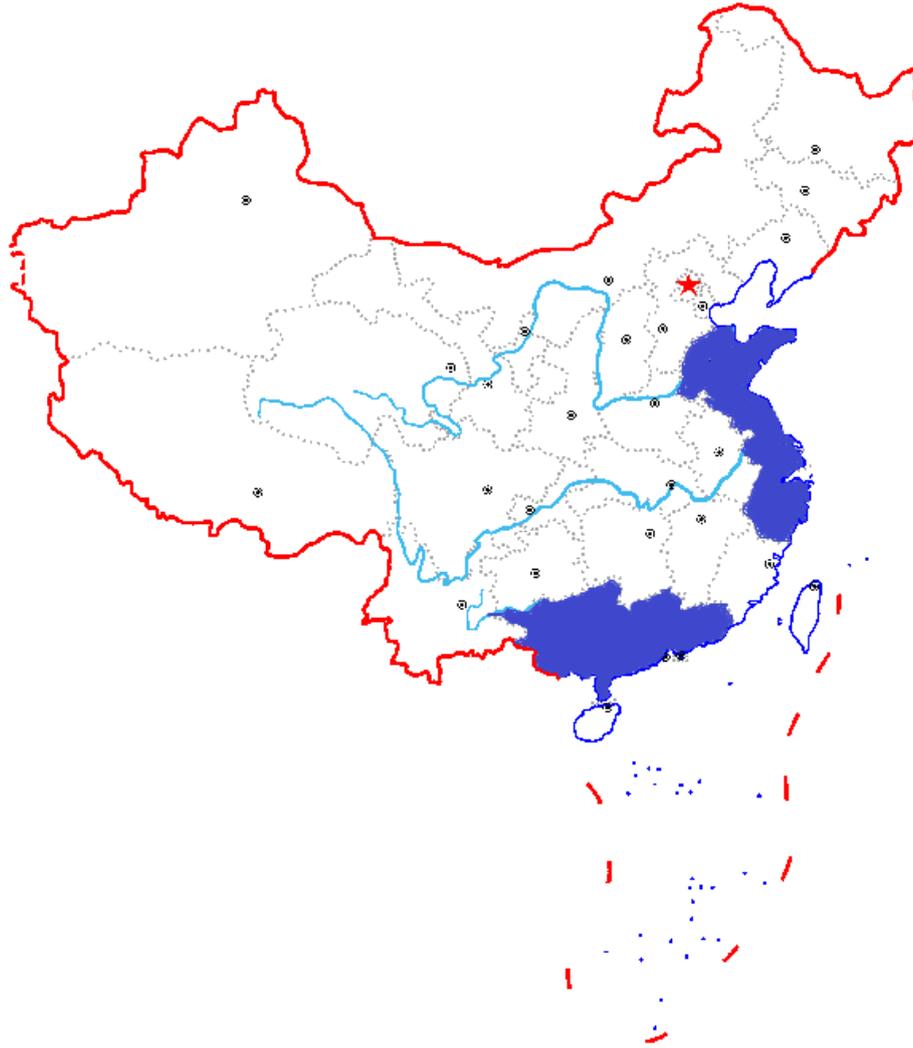


Figure 2 Geographic location of main processing areas of tropical wood products

Table 2 Geographic location of main processing areas of tropical wood products in China

<u>Province/ municipality</u>	<u>Provincial capital</u>	<u>Land area (1000 km²)</u>	<u>Population (million)</u>	<u>Geographic location</u>		<u>GDP per capita (USD \$)</u>
				<u>East longitude</u>	<u>Northern latitude</u>	
<u>Guangdong</u>	<u>Guangzhou</u>	<u>179.7</u>	<u>109.99</u>	<u>109°39'-117°19'</u>	<u>20°13'-25°31'</u>	<u>10704</u>
<u>Guangxi</u>	<u>Nanning</u>	<u>236.7</u>	<u>48.38</u>	<u>104°26'-112°04'</u>	<u>20°54'-26°24'</u>	<u>2683</u>
<u>Shandong</u>	<u>Jinan</u>	<u>158.0</u>	<u>99.47</u>	<u>114°48'-122°42'</u>	<u>34°22'-38°24'</u>	<u>9957</u>
<u>Jiangsu</u>	<u>Nanjing</u>	<u>107.2</u>	<u>79.99</u>	<u>116°18'-121°57'</u>	<u>30°45'-35°20'</u>	<u>14009</u>
<u>Zhejiang</u>	<u>Hangzhou</u>	<u>105.5</u>	<u>55.90</u>	<u>118°-123°</u>	<u>27°21'-31°52'</u>	<u>12285</u>
<u>Shanghai</u>	<u>Shanghai</u>	<u>6.34</u>	<u>24.20</u>	<u>120°52'-122°12'</u>	<u>30°40'-31°53'</u>	<u>16706</u>

Data source: China Statistical Yearbook (2016)

- Main consuming areas of tropical wood products are located in south China and east China, and some big cities in north China and west China such as Beijing, Tianjin, Nanjing, Shanghai, Guangzhou, Shenzhen and Chendu (see green dots in figure below). The detailed information for the 7 cities are showed in table 3.



Figure 3 Geographic location of main consuming cities of tropical wood products

Table 3 Geographic location of main consuming cities of tropical wood products in China

<u>Provincial capital/ municipality</u>	<u>Land area (1000 km²)</u>	<u>Population (million)</u>	<u>Geographic location</u>		<u>GDP per capita (USD \$)</u>
			<u>East longitude</u>	<u>Northern latitude</u>	
<u>Beijing</u>	<u>16.41</u>	<u>21.73</u>	<u>115°42'-117°24'</u>	<u>39°24'-41°36'</u>	<u>16851</u>
<u>Tianjin</u>	<u>11.95</u>	<u>15.62</u>	<u>116°43'-118°04'</u>	<u>38°34'-40°15'</u>	<u>16837</u>
<u>Nanjing</u>	<u>6.59</u>	<u>8.27</u>	<u>118°22'-119°14'</u>	<u>31°14'-32°37'</u>	<u>18715</u>
<u>Shanghai</u>	<u>6.34</u>	<u>24.20</u>	<u>120°52'-122°12'</u>	<u>30°40'-31°53'</u>	<u>16706</u>
<u>Guangzhou</u>	<u>7.43</u>	<u>14.04</u>	<u>112°57'-114°3'</u>	<u>22°26'-23°56'</u>	<u>20536</u>
<u>Shenzhen</u>	<u>1.20</u>	<u>11.91</u>	<u>113°46'-114°37'</u>	<u>22°27'-22°52'</u>	<u>24072</u>
<u>Chengdu</u>	<u>14.31</u>	<u>15.92</u>	<u>102°54'-104°53'</u>	<u>30°5'-31°26'</u>	<u>11009</u>

Data source: China Statistical Yearbook (2016)

1.3.2 Social, cultural, economic and environmental aspects

● Social aspects

China has become the manufacture center of wood products in the world with rapid development of forest industry in recent years. Wood product industry not only plays an important role in local economic growth, but also is a vital source of employment and provides new business opportunities for local people, especially in tropical forest areas (Guangxi, Guangdong, Hainan and Yunnan provinces) and processing areas (Shandong, Jiangsu and Zhejiang provinces).

By means of providing references to forestry authorities for making policies on forest industry, the project will contribute to sustainable development of wood industry in China, and therefore help create **steady and fair employment and business opportunities** for local people and improve their welfare in general.

Table 4 Demographic and GDP data in the project areas

Province/municipality	Population (million, 2016)	GDP (billion USD \$, 2016)
Guangdong	<u>109.99</u>	<u>1169.29</u>
Guangxi	<u>48.38</u>	<u>268.31</u>
Hainan	<u>9.17</u>	<u>59.48</u>
Yunnan	<u>45.97</u>	<u>218.68</u>
Shandong	<u>99.47</u>	<u>985.41</u>
Jiangsu	<u>79.99</u>	<u>1118.91</u>
Zhejiang	<u>55.90</u>	<u>683.60</u>
Shanghai	<u>24.20</u>	<u>403.91</u>
Beijing	<u>21.73</u>	<u>366.17</u>
Tianjin	<u>15.62</u>	<u>263.02</u>

Data source: China Statistical Yearbook (2016)

The project is going to have training courses on statistical data collection and verification methods and forecasting model building, as well as seminars on legal trade of tropical timber and timber products. By means of the training courses/seminars and dissemination of some propagandizing materials, the stakeholders' awareness on the importance of the accurate data collection and analysis system, as well as the importance of legal trade of tropical timber and timber products will be improved. In this way, the implementation of Chinese Timber legality Verification Scheme (CTLVS) in China will be promoted, and the legal trade of tropical timber and timber products between China and other countries will be encouraged and promoted.

In addition, the establishment of consultation platform for stakeholders provides possible chance for private sectors to participate in decision making process of developing forest industry plan, and therefore raise private sectors' social responsibility, which will be great helpful to ensure that the multi-stakeholders' views could be reflected in related policies.

In general, the findings and strategic recommendations made by the project would be taken into account by forest planners, decision makers, as well as private sector in developing strategies of wood-based industry and legal trade of tropical timber in the near future, which have a close relation with people's lives. Therefore, the successful implementation of the project will have a wide social impact.

- **Economic aspects**

The project covered China's economically developed eastern coastal areas and economically underdeveloped inland southwest areas. Forest industry and wood products manufacture play an important role in local economy. The project will be of benefit to forestry authorities by means of providing reliable information and data for formulating policies and working out plans so as to achieve sustainable development of forest industry and alleviate trade conflicts. This will contribute to increase revenue of forest sectors and ultimately promote economic development on national and regional levels. In addition, information exchange among key stakeholders, including publishing reports and newsletter will greatly reduce producers' and traders' economic loss.

Table 5. Gross output value of forest sector and investment of forestry industries in the project areas

<u>Province/municipality</u>	<u>Gross output value of forest sector (million USD \$, 2015)</u>	<u>Forestry investment (million USD \$, 2015)</u>
<u>Guangdong</u>	<u>105151</u>	<u>38</u>
<u>Guangxi</u>	<u>63381</u>	<u>11511</u>
<u>Hainan</u>	<u>6899</u>	<u>11</u>
<u>Yunnan</u>	<u>22125</u>	<u>446</u>
<u>Shandong</u>	<u>93298</u>	<u>2374</u>
<u>Jiangsu</u>	<u>60064</u>	<u>416</u>
<u>Zhejiang</u>	<u>55345</u>	<u>253</u>
<u>Shanghai</u>	<u>5762</u>	<u>4</u>
<u>Beijing</u>	<u>2092</u>	<u>81</u>
<u>Tianjin</u>	<u>359</u>	<u>3</u>

Data source: China Forestry Statistical Yearbook (2015)

The gross output value of forest sector reached 872,981 million USD \$ in 2015. It is showed in table 5 that the provinces and municipalities in project areas are the most vital regions for forestry development, especially Guangxi and Shandong provinces. Rapid development of commercial plantation in China is considered to be an effective way to protect natural forest, while meeting the demand for forest products. Therefore, Chinese government encourage private sector to invest in forestry, especially in the establishment of fast-growing and high-yielding plantation, main tree species are eucalyptus and poplar. With the tenure reform in collective forest area, the forest land was divided into small pieces and been separately managed by small farmers' households, however it is difficult for individual farmer to manage the small area of forest sustainably. With the support of government, it is common that forestry companies rent forest land from farmers to establish fast-growing and high-yielding plantation, especially in Guangxi, Shandong, Jiangsu, Yunnan provinces.

It is well known that forest harvesting is a basic element of forest management in China. Since the 1980s, China has taken a series of measures to conduct strict forest harvesting management. It established a management system covering forest harvesting and regeneration, logging quota, timber production plan, timber transportation and processing permits. The system plays an important role in protecting forest resources and preventing illegal logging. However, it is not well adapting to sustainable forest management in some aspects, which seriously affects the enthusiasm of forest operators. State Forestry Administration of China (SFA) currently considers the ways to improve the current harvesting system. The pilot reform of forest harvesting management had been launched by SFA in 2008, the reform was aimed at the establishment of the new system of sustainable forest management, shift from quota-based management towards sustainable, multi-functional and

multi-objective management. At present, with regard to fast-growing and high-yielding plantation, more independence is granted to private forestry companies to decide logging or not. The project will be of benefit to these private forestry companies and forest farmers through providing accurate information on demand and supply of timber which will help them to make optimal logging plan for profit maximization. In addition, the application of forecasting model will contribute to trend analysis of timber market more accurate, prices reviewing of the wood products easier and profitability analysis more efficiently. All these will contribute a large share of revenue to local economy.

The project outputs will also improve the tropical timber market transparency in China, which will help Chinese government to adjust original policy/strategy to ensure planned utilization of forest resources and optimal trade of tropical timber products as a result of reliable market data of forest products, thus increasing the revenue of forest sector.

- **Environmental aspect**

Following severe environmental degradation from rapid economic development, China is now advancing policies to secure environmental protection and ecosystem services. The project implementation has the advantage of boosting China's timber operators and consumers' consciousness of environmental protection, of implementing and practicing sustainable forest management and establishing forest product certification systems in a bit to consciously reject the entering into domestic markets of counterfeit and shoddy products and illegal timber. As one of the important tropical wood products import and consumer countries in the world, China's efforts will contribute to conservation of global tropical forest resources and implementation of sustainable forest management, as well as improvement of global environment.

The implementation of the project will also strengthen close communications between governmental agencies and manufacturers, which will raise the environmental responsibility of manufacturers, and therefore to promote responsible purchasing, processing and trade of forest products in China. All these will be of great help to sustainable forest management and environment protection, and even contribute to combating climate change.

In addition, China's policy of the environment protection has not only played an active role in protecting ecological system, but also created a huge impact on forest industry. For example, with the implementation of natural forest protection project, the ban of commercial harvesting of natural forest had been put in practice, China was facing a big problem of the lack of large diameter timber supply and a correct way to overcome it was urgently needed. For this reason, China has cancelled import tariff on sawnwood and log import since 1999. Importing timber would help to balance the gap between demand and supply, however due to the huge market and a lot of imported timber was used in the way of import-process-and-export, China has a big impact on world's timber market. The project will help stakeholders to systematically understand the supply chain of tropical timber, long-term trends in international markets of tropical timber and international requirements for timber legality or sustainability, which will contribute to improve the availability of information on tropical forests, forest product markets and trade, and then to enhance the conservation of tropical timber producing forests, to reduce tropical deforestation and forest degradation, to enhance the provision of environmental services.

On the other hand, Chinese government has consistently held the position to take strong measures to combat illegal logging and associated trade in recent years. Remarkable progress has been made in forest certification, especially the national forest certification scheme-CFCC (China Forest

Certification Council) had been endorsed by PEFC scheme in 2014. Green procurement policy for certified forest products has also made great progress. The project outputs will provide technical support for Chinese government to combat illegal logging and associated trade, to promote the rapid development of forest certification in China. All these will contribute to environment protection and sustainable international trade of tropical timber.

1.4 Expected outcomes at project completion

The project is to be completed in 2 years. After project completion, through compiling and publishing research reports and various kinds of materials, expanding the exchange network of international forest product information, holding training courses and seminars, conducting market survey and consumers' preference questionnaire, and consulting stakeholders, the following outcomes will be achieved.

Demand and supply of tropical wood products in China towards 2030 will be forecasted, which will be conducive to fill the gap between demand and supply of tropical wood products in future. After project completion, a research report entitled "The Trends of Chinese Wood Product Markets and Their Dependence on International Trade of Tropical Timber towards 2030" will be put forward, its content will not only touch upon the analysis of factors influencing tropical wood products supply and demand in China, but also forecasting the **trends** of Chinese wood product markets and their dependence on international trade. At the same time, the accuracy and reliability of forecasting results will be improved a lot through using appropriate univariate and multivariate statistical techniques and forecasting model. Furthermore, the project will provide feasible scenarios and suggestions on how to satisfy future market demands and realize the balance between supply and demand.

Consultation framework among stakeholders will be established. Stakeholders will participate in almost all project activities actively. Meanwhile, the project team will consult stakeholders regularly and take their comments and suggestions to optimize research results during project implementation. For example, implementing agency (CAF) will not only establish more close relationship with governments such as State Forestry Administration, Ministry of Commerce, but also keep closer links with the wood products sector in China and in producing/consuming countries during implementing the project. It will be greatly enhanced for stakeholders to understand the production, demand and trade dynamics of Chinese tropical wood products market and its trends in future. This will not only create better conditions for obtaining reliable data and first-hand materials on forest products market, but also promote close cooperation between China and producing and consuming countries of tropical timber.

Trade flow of tropical wood products will be optimized. After project completion, the reference materials will be compiled and published including "The Impact of Timber Legality Regulations: Perceptions and Strategic Responses within Tropical Wood Manufacturing Sector in China", "The Strategic Policy Analysis of Long Term Supply and Demand for Wood in China" and "Investigation Report of A Survey on Consumer's Demand/Preference to Major Tropical Wood products in China" etc. These materials will make Chinese authorities, relevant industrial societies and enterprises undertaking tropical forest product operation to have sufficient understanding of updated changes and future trends of China's tropical forest product markets, thus they could have a basis to follow when they implement macro management, formulate policies and make decisions. Meanwhile, many countries with rich forest resources and multinational corporations are eager to access Chinese market. These countries and corporations need to understand the Chinese timber market situation and demand potential in future so as to be able to develop sound marketing strategies. These materials and relevant market information will help producers and traders abroad to timely understand the situation of demand and supply of tropical wood products and make feasible

marketing strategies, and ultimately facilitate the rational flow of tropical wood products according to the rules of the market.

Public awareness of timber legality and sustainability will be raised. Seminars for stakeholders and case studies for major tropical wood products processing and trading enterprises will be carried out during implementing the project. The international requirements for timber legality or sustainability will be explained and discussed during holding seminars and conducting case studies. In addition, the international requirements for timber legality or sustainability will also be disseminated widely to the public through the newsletter "Chinese Wood Products Markets Information". The project team will also establish links with the Chinese media so as to promote the ideas of legality and sustainability to the public in a larger scope.

PART 2. PROJECT RATIONALE AND OBJECTIVES

2.1 Rationale

As a follow up of the ITTO project PD 480/07 Rev.2 (M): "Demand and Supply of Tropical Wood Products in China towards 2020", a good foundation had been laid for developing the Project. When preparing the Project proposal, we had gone through a very thorough process of literature search and surveys to gain insight into the changes in forest products market over the past decade. At the same time, we consulted different stakeholders to solicit their contributions to the proposal, including Forest Products Statistic Division of State Forestry Administration (SFA), General Administration of Customs (GAC), China National Forest Products Industry Association (CNFPPIA), China Timber & Wood Products Distribution Association (CTWPDA) and some wood manufacturers. The rationale had been well researched and project activities formulated with inputs from stakeholders. Some international agencies, such as GFTN of WWF and TNC had also contributed to the process.

In consideration of the latest changes and development trends of domestic economy and society, the project will forecast the direction of tropical wood product markets and their dependence on international trade of tropical timber towards 2030 in the context of globalization and green consumption more and more popular. This project focuses on updated dynamics of production, consumption and trade of tropical wood products so as to explore various change drivers and their likely impacts on future direction of tropical wood product markets in China. All these will contribute to forecast the dependence of Chinese wood product markets on international trade. In addition, the project will provide the best available market information, facilitating policy dialogue and communication, and building capacity for all interested stakeholders.

2.1.1 Institutional set-up and organizational issues

Taking into account the profile, the institutional set up for its implementation will be made up of two research and consultative institutions as described below:

Research Institute of Forestry Policy and Information (RIFPI) of Chinese Academy of Forestry (CAF)

The Research Institute of Forestry Policy and Information (RIFPI), officially founded under the Chinese Academy of Forestry (CAF) in February 1964, is a public research organization specifically engaging the policy research on forestry and related information service. Since the 1990s, the RIFPI has continuously expanded its research and consulting focuses, and won relatively strong disciplinary advantages in terms of macro forestry strategy and planning, valuation of forest ecosystem services and green GDP, forest product market and trade, collective forest tenure reform, state-owned forest management system, forestry cooperative economy, participatory development and community forestry, forest certification and sustainable management, environment management for plantation forest, forestry policy on climate change, forestry history and ecological culture, network information sharing, management of forestry intellectual property, digital library construction and so on. The RIFPI has been regarded as the "China's forestry development strategy think-tank", which plays an important role on providing services for government decision-making, science and technology innovation and industry development. The RIFPI always pays attention to international cooperation and communication. It has maintained and developed close cooperation with international organizations such as FAO, ITTO and WWF as well as some countries and regions like the EU, Germany, Finland and Japan. After 2006, the RIFPI has executed more than 50 international cooperation projects, mainly funded by FAO, ITTO, Ford Foundation, the EU, the Nature Conservancy, German

Tech-Cooperation Company (GIZ), Rainforest Alliance, Japan International Cooperation Agency (JICA), the UK Department for International Development (DFID) and the other international organizations.

The Center for International Forest Product Trade (CINFT) of State Forestry Administration (SFA)

The Center for International Forest Product Trade (CINFT) of SFA is an institution specializing in policy consultations and research on the international market of and trade in forest products. The institution was established with the guidance and support of the Department of Development Planning and Assets Management of SFA, a panel of experts with extensive market research experience on forest products and strong science and technology R&D credentials, a powerful professional database and a comprehensive collection of books and materials, and relevant authorities of SFA.

The main mission of the Center is undertaking trade policy research on forest products, technical support for trade negotiations, analysis on trade alerts, and trade market consultations, thereby providing recommendations for China's forest product trade decisions, offering consultation services for outbound forest products, and building a multi-stakeholder communication platform for the government, enterprises, associations and domestic and foreign forestry institutions, so as to facilitate the sustained development of China's trade in forest products.

2.1.2 Stakeholder analysis

The broader stakeholders of the project cover government agencies, research institutes, associations, NGOs, private sector and general public including consumers etc. The stakeholder analysis is below:

Group of stakeholders	Characteristics	Problems, needs, interests	Potential	Involvement in project
<i>Primary stakeholders</i>				
State Forestry Administration	Policy makers of forest sector	Lack of reliable market information and forecasting results for policy making	SFM and forest industry development	Primary project beneficiaries and Primary sources of information
Ministry of Commerce	Trade policy makers. ITTO's focal point in China	Lack of adequate information for trade policy making	Knowledge and competency on trade policy & law	Primary project beneficiaries. Primary sources of information
Domestic companies, enterprises and markets engaging in tropical forest product trade	Most of them are private-owned and have rich experience on tropical trade business	Limited knowledge of environment-related policies of global tropical timber market and trade	Rich experience in tropical timber trade business	Primary project beneficiaries. Primary sources of information
Domestic companies and enterprises engaging in	Most of them are private-owned and have rich experience on	Limited knowledge of legal sources of tropical timber and the direction of	Rich experience in tropical wood products processing	Primary project beneficiaries. Primary sources of information

tropical forest product production and processing	tropical wood products processing	domestic market		
International companies and enterprises engaging in tropical forest product trade with China	Most of them are transnational corporations with rich information on global wood product market	Limited knowledge of dynamics of wood product market and updated related trade policies in China	Diversified information on international trade of tropical wood products	Primary project beneficiaries. Primary sources of information
International companies and enterprises engaging in tropical forest product production and processing	Their sawmills located in tropical areas, they would like to access to Chinese market	Limited knowledge of direction of wood product market in China	Knowledge and experience in tropical timber processing	Primary project beneficiaries. Primary sources of information
<i>Secondary stakeholders</i>				
National Bureau of Statistics	Government agency responsible for statistic issues	It is difficult to collect reliable production and consumption data of forest products	Diversified data on social, economic and environmental aspects	Secondary information source
Forest industry associations	Link private sector with government agencies in forest sector	Inadequate information on future trends of forest industry structure in China	Forest industry policy advocacy	Secondary information source
General Administration of Customs	Government agency responsible for import and export issues	Limited knowledge of legal timber verification and forest certification	Diversified data on export and import of tropical wood products	Secondary information source
Relevant international organizations such as ITTO, FAO, UNECE, WWF and WB	They contribute to promote SFM and responsible trade of forest products	Lack of systematic analysis on updated dynamics of forest wood market in China	Rich experience in the field of SFM, Forest certification and responsible trade of forest products	Direct participation in project activities and disseminating results of the project
<i>Tertiary stakeholders</i>				
Consumers of tropical wood products	End users of tropical wood products	Limited knowledge of legal timber verification and forest certification	Pay more attention to forest protection	Direct participation in project activity (consumers' preference survey)

Domestic research and teaching institutions	Provide technical support and policy making references for government agencies	Insufficient financial support for conducting market survey and trade policies study	Professional trainer and high level research capacity	Direct participation in capacity building activities
Media	They play a key role in guiding public opinion	Lack of information on SFM, Forest certification and responsible trade of forest products	Promote public awareness of green consumption	Direct participation in disseminating results of the project

2.1.3 Problem analysis

With the rapid development of economy and urbanization, China's demand for wood products is increasing dramatically and its potential is great in future. Especially in recent years, with the international requirements for legality and sustainability, great changes have taken place in wood products market of China. The key problem identified by the project is the lack systematic analysis on updated dynamics of supply and demand, trends of forest product market in China with focus on tropical timber, with the resulting consequences of the low transparency in tropical wood products market in China which has a negative impact on sustainable development of international trade. **The main causes of the key problem are as follows:**

- Limited research capacity to conduct forest economic and trade analyses on demand and supply of tropical wood products.

Most of the existing forecasting studies on wood demand and supply only touch upon the wood products demand through domestic consumption, with less scientific and comprehensive analysis on current situation and trends of forest product market. All these have a negative impact on scientific and correct prediction of future domestic supply of tropical wood products.

Therefore, it is necessary to improve the capacity of researchers and data statisticians by introducing modern economic forecasting models, data collection and verification methods, so as to provide reliable data and information for stakeholders.

- Lack of first-hand data and information on the perception and responses within the Chinese wood manufacturing sector to environmental marketing factors including timber legality regulations, forest certification etc.

With the international requirements for legality and sustainability, such as the 2008 US Lacey Act Amendment and 2013 EU Timber Regulation, many export-oriented manufacturers have to adjust their materials sourcing and marketing strategy. It is necessary to assess the effect of these requirements for legality and sustainability on the perceptions and actions of wood products manufacturers, so as to understand the actual demands for tropical timber in China and provide solutions for manufacturers and traders to enter international forest product market.

- Lack of strategic policy analysis of long term Chinese demand for wood, especially Chinese policies supporting wood as an environmentally friendly product

Chinese government issued many policies which will influence the supply and demand for wood. For example, China will push forward its Natural Forest Protection Program and phase out all commercial logging of natural forests by the end of 2017. Meanwhile, China has planned 14 million hectares of strategic timber reserves, which will help fill the gap after the ban on commercial logging of natural forests. Therefore, the structure of wood supply will change a lot in China in future. In addition, China also developed policies supporting wood as an environmentally friendly product in order to combat global warming. It is necessary to analyze these strategic policies to understand the future supply and demand for wood in China.

- Limited knowledge on the consumers' preference for tropical timber and their tastes shift in future

The end use of tropical wood products focuses on three fields: decoration, flooring and furniture. In recent years, arising from rapid growth of national economy and urbanization and blooming real estate, particularly from the increasing people's living standard, people's consumption preference for indoor decoration, flooring and furniture is changing. However, there is little understanding of customers' preference and future demand for tropical wood products in China, which will influence correct prediction of the direction of domestic markets and their dependence on international trade of tropical timber.

- No consultation or information sharing mechanism on tropical wood products market among stakeholders

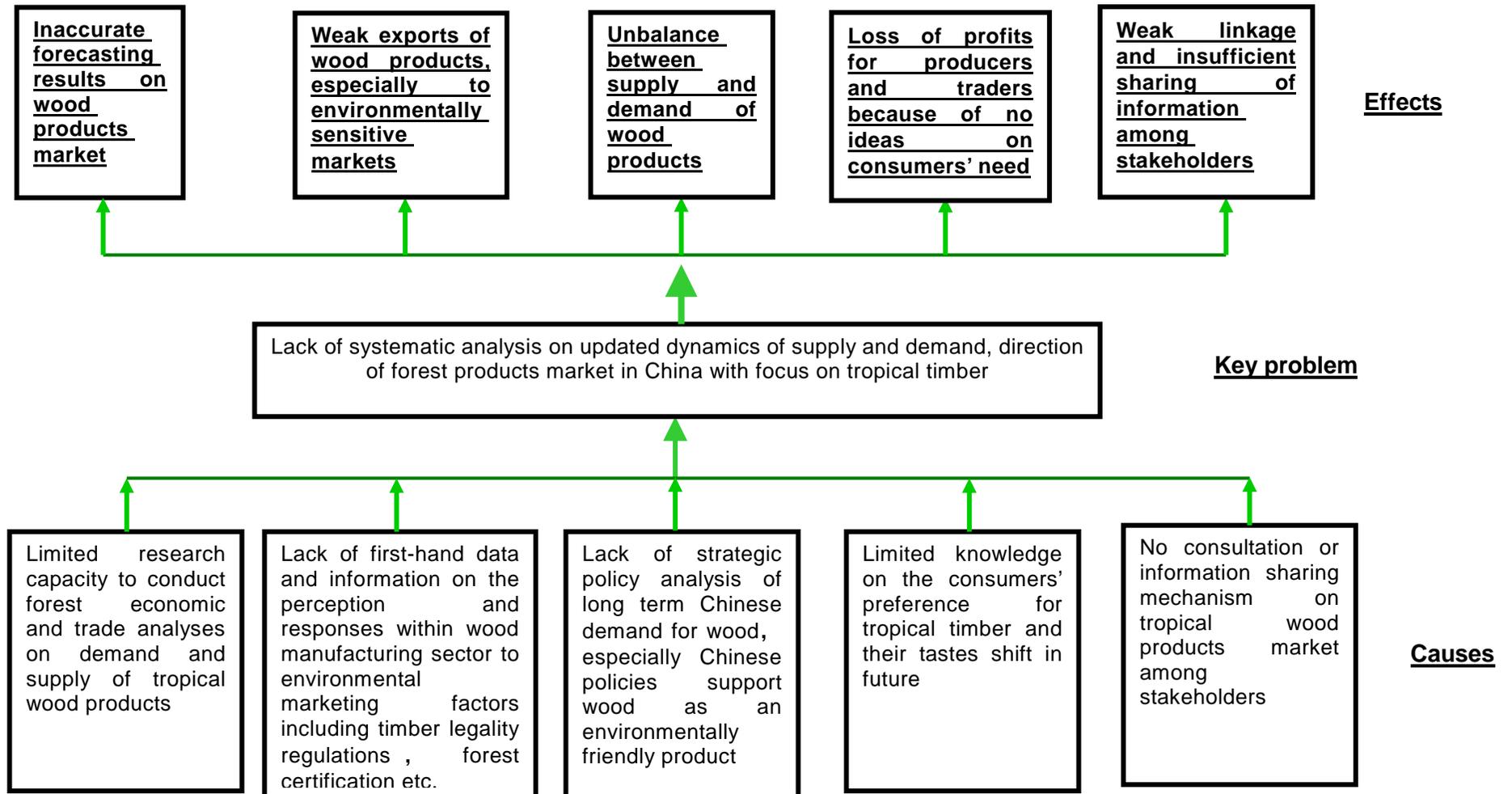
At present, lack of coordination and information sharing among the key sectors (such as Ministry of Commerce, State Forestry Administration, industry associations and manufacturers and traders) has also affected the reliability, consistency and integrality of the data and information on forest products market. This project will work closely with the stakeholders to ensure fully information exchange among them.

In this regards, some stakeholders such as producers, traders and exporters usually make wrong decisions because of having no idea on demand and supply of tropical wood products. All these have a negative impact on achieving the balance between demand and supply of tropical wood products, in other words, obstructing the sustainable development of tropical wood products market. **In general, the effects of the key problem are as follows:**

- **Inaccurate forecasting results on wood products market**
- **Weak exports of wood products, especially to environmentally sensitive markets**
- **Unbalance between supply and demand of wood products**
- **Loss of profits for producers and traders because of no ideas on consumers' need**
- **Weak linkage and insufficient sharing of information among stakeholders**

The problem tree of the project is below:

Problem tree



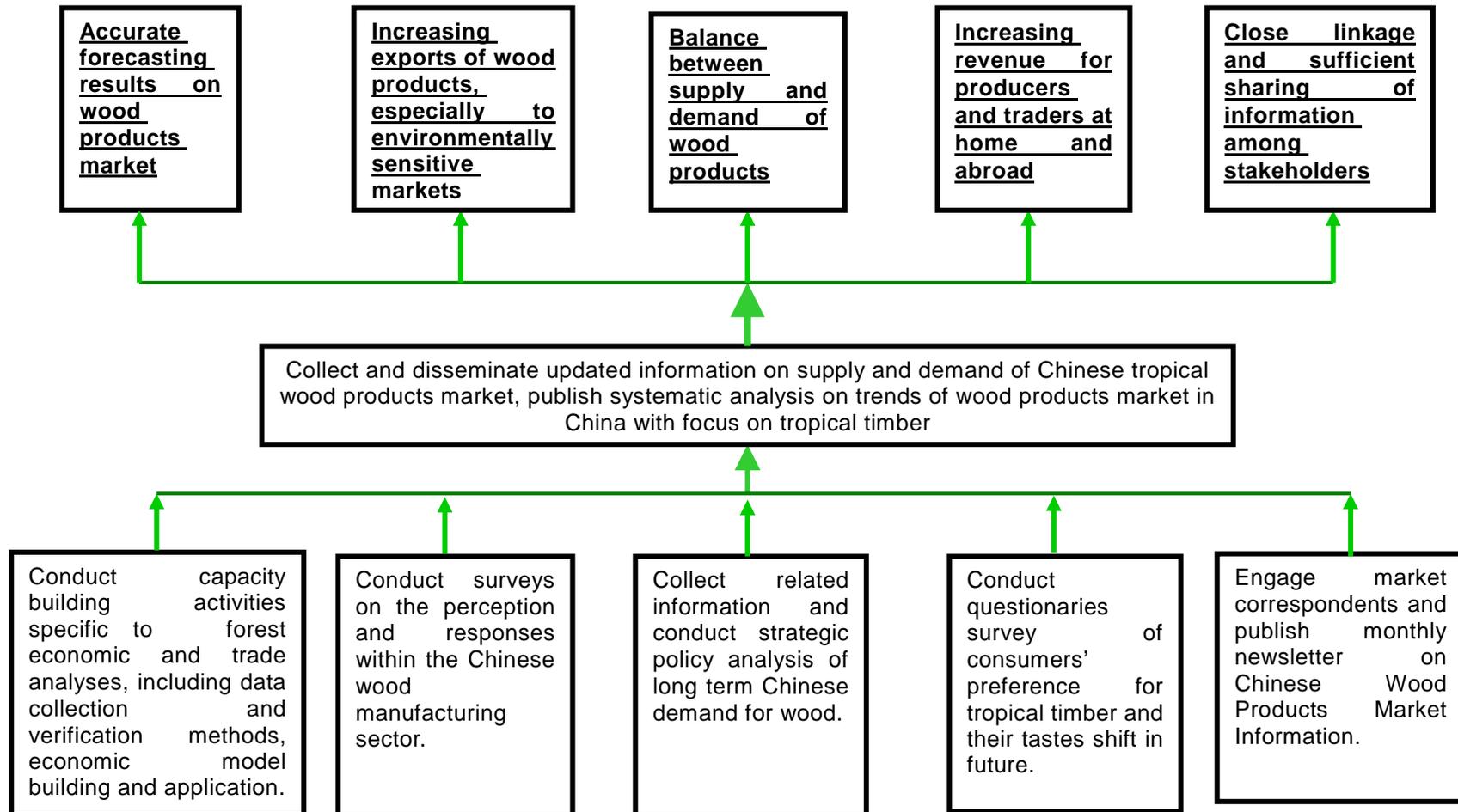
2.1.4 Logical Framework Matrix

PROJECT ELEMENTS	INDICATOR	MEANS OF VERRIFICATION	ASSUMPTIONS
<p>Development objective: To increase the transparency of tropical wood products markets in China and promote sustainable development of global wood products trade</p>	<ul style="list-style-type: none"> ● Proportion of certified or legal verified wood products in the market increased ● Public awareness of legality and sustainability raised ● Supply and demand of wood products tend to be balanced ● Trading conflicts reduced 	<ul style="list-style-type: none"> ● Related documents issued by governmental departments ● Field visit ● Forest stakeholder surveys 	<ul style="list-style-type: none"> ● Stable politic and economic situation ● Increasing demands for topical wood products ● Stable development of wood products trade ● Good cooperation among stakeholders
<p>Specific objective: To systematically analyze the dynamics and direction of forest products markets in China, and forecast their dependence on international trade of tropical timber towards 2030</p>	<ul style="list-style-type: none"> ● Forecast data on situation of demand and supply of China's tropical wood products by 2030 put forward and recognized by key stakeholders ● Consultation framework among stakeholders established ● Trade flow of tropical wood products optimized 	<ul style="list-style-type: none"> ● Stakeholders survey ● Field visit ● Review the research reports 	<ul style="list-style-type: none"> ● Supports of SFA , GAC and major government agencies ● Good cooperation among stakeholders ● Stable international trade of tropical timber
<p>Output 1: Research report – The direction of forest products markets in China and their dependence on international trade of tropical timber towards 2030</p>	<ul style="list-style-type: none"> ● Economic model of predicting market demand and supply of tropical wood products developed ● The degree of dependency of Chinese wood products markets on international trade of tropical timber identified ● Recommendations for optimizing trade flows of tropical wood products put forward ● By the end of the second year, the report have been published and disseminated to stakeholders 	<ul style="list-style-type: none"> ● Review the research report ● Minute of consultation meeting ● Evaluation by ITTO 	<ul style="list-style-type: none"> ● Close cooperation among stakeholders (government agencies, associations and private sectors) ● Good information exchange
<p>Output 2: Analysis report – The impacts of international requirements for timber legality or sustainability : perceptions and strategic responses within the Chinese wood manufacturing sector</p>	<ul style="list-style-type: none"> ● Case study analysis of 10 major tropical wood products processing and trading enterprises ● By the end of the second year, the report have been finished 	<ul style="list-style-type: none"> ● Field visit ● Review related records and documents 	<ul style="list-style-type: none"> ● Enterprises' supports and associations' coordination

PROJECT ELEMENTS	INDICATOR	MEANS OF VERRIFICATION	ASSUMPTIONS
<p>Output 3: Investigation report – A survey on consumers' preference on tropical wood products in China</p>	<ul style="list-style-type: none"> ● Survey conducted in 7 large and medium scale cities ● The report have been finished at the end 	<ul style="list-style-type: none"> ● Consumer questionnaire ● Related interview records 	<ul style="list-style-type: none"> ● Associations' support and consumers' cooperation
<p>Output 4: Analysis report – Strategic policy analysis of long term Chinese demand for wood</p>	<ul style="list-style-type: none"> ● Policies encouraging the use of wood collected and analyzed ● Recommendations for meeting wood demand put forward ● By the end of the second year, the report have been finished 	<ul style="list-style-type: none"> ● Stakeholders' interview ● Related interview records 	<ul style="list-style-type: none"> ● Governments and associations' supports ● Relevant research institutions' support and cooperation
<p>Output 5: Holding 2 training courses on data collection and verification methods, economic model building and applications for researchers, officials, statisticians, manufacturers and traders</p>	<ul style="list-style-type: none"> ● One training course held in South China, mainly for statisticians, manufacturers and traders, 70 participants ● The other training course held in Beijing, mainly for researchers, officials, statisticians, NGOs, 70 participants ● Two training courses have been held by the end of the second year, 	<ul style="list-style-type: none"> ● List of participants ● Minute of training courses ● Review training materials ● Trainees' evaluation 	<ul style="list-style-type: none"> ● Relevant research institutions, governing bodies and enterprises' support and cooperation ● Governments and associations' supports
<p>Output 6: Publishing the China's Forest Products Market Information monthly in both Chinese and English</p>	<ul style="list-style-type: none"> ● Provide timely market information ● 12 issues of newsletters have been published and disseminated to stakeholders 	<ul style="list-style-type: none"> ● Readers' evaluation ● Review newsletters 	<ul style="list-style-type: none"> ● Support from 12 specially invited correspondents and stakeholders ● Chinese and foreign readers' interests

2.2 Objectives

Objective Tree



2.2.1 Development objectives and impact indicators

The development objective of the project is to increase the transparency of tropical wood products market in China and promote sustainable development of global wood products trade.

Indicators:

- Proportion of certified or legal verified wood products in the market increased
- Public awareness of legality and sustainability raised
- Supply and demand of wood products tend to be balanced
- Trading conflicts reduced

2.2.2 Specific objectives and outcome indicators

The specific objective of the project is to **systematically** analyze the dynamics and direction of forest product markets in China, and forecast their dependence on international trade of tropical timber towards 2030.

Indicators:

- Forecast data on situation of demand and supply of China's tropical wood products by 2030 put forward and recognized by key stakeholders
- Consultation framework among stakeholders established
- Trade flow of tropical wood products optimized

PART 3. DESCRIPTION OF PROJECT INTERVENTIONS

3.1 Outputs and Activities

3.1.1 Outputs

Output 1: Research report – The direction of forest products markets in China and their dependence on international trade of tropical timber towards 2030

Indicators:

- Economic model of predicting market demand and supply of tropical wood products developed
- The degree of dependency of Chinese wood products markets on international trade of tropical timber identified
- Recommendations for optimizing trade flows of tropical wood products put forward
- By the end of the second year, the report have been published and disseminated to stakeholders

Output 2: Analysis report – The impacts of international requirements for timber legality or sustainability: perceptions and strategic responses within the Chinese wood manufacturing sector

Indicators:

- Case study analysis of 10 major tropical wood products processing and trading enterprises
- By the end of the second year, the report have been finished

Output 3: Investigation report – A survey on consumers' preference on tropical wood products in China

Indicators:

- Survey conducted in 7 large and medium scale cities
- By the end of the second year, the report have been finished

Output 4: Analysis report – Strategic policy analysis of long term Chinese demand for wood

Indicators:

- Policies encouraging the use of wood collected and analyzed
- Recommendations for meeting wood demand put forward
- By the end of the second year, the report have been finished

Output 5: Holding 2 training courses on data collection and verification methods, economic model building and applications for researchers, officials, statisticians, manufacturers and traders

Indicators:

- One training course held in South China, mainly for statisticians, manufacturers and traders, 30 participants
- The other training course held in Beijing, mainly for researchers, officials, statisticians, NGOs, 40 participants
- By the end of the second year, two training courses have been held

Output 6: Publishing the China's Forest Products Market Information in both Chinese and English

Indicators:

- Provide timely and accurate market information
- Helps readers to understand the dynamic situation of Chinese timber market
- By the end of the second year, 12 issues of newsletters have been published and disseminated to stakeholders

3.1.2 Activities

For Output 1:

- Activity 1.1** Conduct 15 domestic market investigations in South China (mainly Pear River Delta, 4), East China (Yangtze River Delta, such as Shanghai City, Zhejiang, Jiangsu and Shandong provinces, 4), Southwest China (Yunnan and Sichuan provinces, 3), North China (Beijing, Tianjin and Hebei, 2) and Northeast China (Liaoning Province, 2) to collect updated dynamics on timber resources, production, consumption and trade.
- Activity 1.2** Collect, collate and copy relevant materials
- Activity 1.3** Compile and translate research report
- Activity 1.4** Publish and disseminate research report
- Activity 1.5** Attend international forums

For Output 2:

- Activity 2.1** Collect materials and visit associations
- Activity 2.2** Conduct 10 domestic investigations to tropical wood processing enterprises in Guangdong, Guangxi, Jiangsu, Zhejiang, Shanghai, Shandong provinces to collect information on perceptions and strategic responses within the Chinese wood manufacturing sector to international requirements for timber legality or sustainability.
- Activity 2.3** Hold a seminar to share information among enterprises
- Activity 2.4** Analyze data collected and verify these data with related stakeholders
- Activity 2.5** Write report and translate it into English
- Activity 2.6** Print and disseminate the report

For Output 3:

- Activity 3.1** Collect, copy and collate existing materials, work out questionnaire and distribute it and get feedback
- Activity 3.2** Carry out 7 domestic investigations in main consumption areas of tropical wood products, such as Guangzhou, Shenzhen, Shanghai, Nanjing, Beijing, Tianjin and Chengdu to collect information and make market surveys.
- Activity 3.3** Write and translate the report
- Activity 3.4** Print and disseminate the report

For Output 4:

- Activity 4.1** Collect, copy and collate existing materials
- Activity 4.2** Visit to and consult with stakeholders of governmental departments and industry associations, as well as representative of NGOs.
- Activity 4.3** Write and translate report
- Activity 4.4** Print and disseminate research report

For Output 5:

- Activity 5.1** Set up an organizing group to draw plan. One training course will be held in South China, mainly for statisticians, manufacturers and traders, 30 participants; the other training course will be held in Beijing, mainly for researchers, officials, statisticians, NGOs, 40 participants.
- Activity 5.2** Compile and print training materials
- Activity 5.3** Hold two training courses including meeting room renting, meals and hospitalities

For Output 6:

- Activity 6.1** Engage 12 specially invited correspondents
- Activity 6.2** Collect materials and solicit contributions
- Activity 6.3** Editing and translation
- Activity 6.4** Printing, publishing and disseminating

3.2 Implementation approaches and methods

In order to promote the development of international tropical forest product markets and satisfy domestic market demand for tropical wood products, the project will pay equal attention to domestic policies and international policies shaping forest products markets. Meanwhile, the project will study not only demand, supply and production within the Chinese tropical forest product markets but also the position of China's demand and imports within the global tropical forest product markets. It will provide updated information to China's domestic enterprises undertaking tropical wood products trade, operation, manufacturing and processing. This will be done through publishing periodical newsletter.

In order to acquire sufficient materials related to supply and demand of domestic market, the project team will closely collaborate with relevant industrial associations (such as China National Wood Products Industry Association, China National Wood products Trading Association, Chinese Association of Architecture Decoration, Chinese Association of Furniture and Chinese Association of Paper-Making) and General Administration of Customs (GAC, the major source of import and export statistical data). In addition, contacts and cooperation will be established with the agencies of major producer and exporting countries set-up in China (including embassies and trade promotion agencies) and with the industrial associations in China and overseas.

In order to improve the forecasting accuracy, appropriate univariate and multivariate statistical techniques will be applied in the project, and economic model will be set up to ensure the objective, accurate forecasting results of the degree of dependency on international trade of tropical timber. Meanwhile, literature review, market analysis and strategic analysis will be performed during implementation of the project.

In all activities of the project, participatory method will be adopted and consultative mechanism will be carried out with stakeholders. It is necessary to ensure outputs more practical, objective and feasible.

3.3 Work plan

Output and Activity	Responsible party	Plan (Month)																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Output 1: Research report-The direction of forest products markets and their dependence on international trade by 2030	Project team																									
Activity 1.1 conduct 15 Domestic investigations																										
Activity 1.2 Collect relevant materials.																										
Activity 1.3 Compile and translate research report																										
Activity 1.4 Publish and disseminate research report																										
Activity 1.5 Attend international forums.																										
Output 2: Analysis report-The impacts of timber legality or sustainability : perceptions and strategic responses within the Chinese wood manufacturing sector																										
Activity 2.1 Collect materials																										
Activity 2.2 Conduct 10 Domestic investigations																										
Activity 2.3 Hold a seminar																										
Activity 2.4 Analyze and verify data																										
Activity 2.5 Write report and translate		Project team																								
Activity 2.6 Print and disseminate report																										
Output 3: Investigation report – A survey on consumers’ preference on tropical wood products in China		Project team and relevant institutions																								
Activity 3.1 Collect, copy and collate existing materials																										
Activity 3.2 Carry out domestic investigations																										
Activity 3.3 Write and translate report																										
Activity 3.4 Print and disseminate report																										

Output and Activity	Responsible party	Plan (Month)																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Output 4: Analysis report – Strategic policy analysis of long term Chinese demand for wood	Project team and relevant institutions																									
Activity 4.1 Collect, copy and collate existing materials																										
Activity 4.2 Visit to and consult with stakeholders																										
Activity 4.3 Write and translate report																										
Activity 4.4 Print and disseminate report																										
Output 5: Holding 2 training courses for researchers, officials, statisticians, manufacturers and traders	Project team and relevant institutions																									
Activity 5.1 Set up an organizing group to draw plan.																										
Activity 5.2 Compile and print materials																										
Activity 5.3 hold two training courses																										
Output 6: Publishing Market Information monthly in both Chinese and English	Project team and correspondent																									
Activity 6.1 Engage correspondents																										
Activity 6.2 Collect materials and solicit contributions																										
Activity 6.3 Editing and translation																										
Activity 6.4 Printing, publishing and disseminating																										

3.4 Budget

3.4.1 Master budget schedule

Outputs/ activities	Description	Budget component	Quality		Unit	Unit cost US\$	Total cost US\$	ITTO		Executing agency	
			Year 1	Year 2				Year 1	Year 2	Year 1	Year 2
Output 1	Research report – The direction of forest products markets in China and their dependence on international trade of tropical timber by 2030										
A1.1	Conduct 15 Domestic investigations										
	Travel	33.1	10	5	Expert	500	7,500	5,000	2,500		
	Accommodation-	31.1	100	50	Expert	100	15,000	10,000	5,000		
	Transportation	33.3	10	5	Local guide	200	3,000	2,000	1,000		
A1.2	Collect, collate and copy relevant materials										
	Raw materials	51	3000	2,000	Page	0.2	1,000	600	400		
	Salary of 2 assistants	12	24		Month	600	14,400			14,400	
	Salary of coordinator	11	12	12	Month	1500	36,000			18,000	18,000
	Utilities	53	12	12	Month	500	12,000			6,000	6,000
	Office supplies	54	12	12	Month	100	2,400			1,200	1,200
A1.3	Compile and translate research report										
	Compile	21		120	Page	30	3,600		3,600		
	Translation	21		120	Page	80	9,600		9,600		
	Salary of 2 experts	11		24	Month	2000	48,000				48,000
A1.4	Publish and disseminate research report										
	Printing	22		600	Copy	12	7,200		7,200		
	Dissemination	22		600	Copy	4	2,400		2,400		
	Salary of 2 assistants	12		24	Month	600	14,400				14,400
A1.5	Attend international forums										
	International travel	32.1		2	Expert	3000	6,000		6,000		
	Accommodation	31.1		14	day	400	5,600		5,600		
Subtotal							188,100	17,600	43,300	39,600	87,600
Output 2	Analysis report – The impacts of international requirements for timber legality or sustainability: perceptions and strategic responses within the Chinese wood manufacturing sector										
A2.1	Collect materials										
	Raw materials	51	1000	1000	Page	0.2	400	200	200		
	Salary of assistant	12	3	3	Month	600	3,600			1,800	1,800
	Office supplies	54	3	3	Month	150	900	450	450		

A2.2	Conduct 10 Domestic investigations to tropical wood processing enterprises											
	Travel	33.1	5	5	Expert	500	5,000		2,500	2,500		
	Accommodation-	31.1	40	40	Expert	100	8,000		4,000	4,000		
	Transportation	33.3	5	5	Local guide	200	2,000		1,000	1,000		
A2.3	Hold a seminar to share information among enterprises											
	Travel	33.1		12	Representative of enterprises	500	6,000			6,000		
	Accommodation-	31.1		36	Representative of enterprises	100	3,600			3,600		
	Meeting room renting	61		2	day	600	1,200			1,200		
	Purchase a digital camera	44	1		item	1,000	1,000		1,000			
A2.4	Analyze data collected and verify these data with related stakeholders											
	Salary of assistant	12		3	Month	600	1,800				1,800	
A2.5	Write report and translate it into English											
	Compile the report	21		50	Page	30	1,500			1,500		
	Translation	21		50	Page	80	4,000			4,000		
A2.6	Print and disseminate the report											
	Printing	22		300	Copy	10	3,000			3,000		
	Dissemination	22		300	Copy	4	1,200			1,200		
Subtotal							43,200		9,150	28,650	1,800	3,600
Output 3	Investigation report – A survey on consumers’ preference on tropical wood products in China											
A3.1	Collect, copy and collate existing materials, work out questionnaire and distribute it and get feedback											
	Raw materials	51	2000	2000	Page	0.2	800		400	400		
	Salary of assistant	12	1	1	Month	600	1,200				600	600
	Office supplies	54	1	1	Month	150	300				150	150
A3.2	Carry out 7 domestic investigations in main consumption areas of tropical wood products											
	Travel	33.1		7	Expert	500	3,500			3,500		
	Accommodation-	31.1		70	Day	100	7,000			7,000		
	Transportation	33.3		7	Time	200	1,400			1,400		
	Salary of assistant	12		1	Month	600	600				600	
A3.3	Write and translate the report											
	Compile	21		50	Page	30	1,500			1,500		
	Translation	21		50	Page	80	4,000			4,000		
A3.4	Print and disseminate the report											
	Printing	22		300	Copy	10	3,000			3,000		
	Dissemination	22		300	Copy	4	1,200			1,200		
Subtotal							24,500		400	22,000	750	1,350

Output 4	Analysis report – Strategic policy analysis of long term Chinese demand for wood										
A4.1	Collect, copy and collate existing materials										
	Raw materials	51	2000	2000	Page	0.2	800		400	400	
	Salary of assistant	12	1	1	Month	600	1,200				600 600
	Office supplies	54	1	1	Month	150	300				150 150
A4.2	Visit to and consult with stakeholders of governmental departments and industry associations, as well as representative of NGOs										
	Consulting experts	13		10	person	300	3,000			3,000	
	Salary of assistant	12		1	Month	600	600				600
A4.3	Write and translate research report										
	Compile the report	21		50	Page	30	1,500			1,500	
	Translation	21		50	Page	80	4,000			4,000	
A4.4	Publish and disseminate research report										
	Printing	22		600	Copy	10	6,000			6,000	
	Dissemination	22		600	Copy	4	2,400			2,400	
Subtotal							19,800		400	17,300	750 1,350
Output 5	Holding 2 training courses for researchers, officials, statisticians, manufacturers and traders										
A5.1	Set up an organizing group to draw plan										
	Salary of assistant	12	1	1	Month	600	1,200				600 600
A5.2	Compile and print training materials										
	Compile	21	50	50	Page	30	3,000		1,500	1,500	
	Printing	22	100	100	Copy	12	2,400		1,200	1,200	
A5.3	Hold two training courses including meeting room renting, meals and hospitalities										
	Travel	33.3	20	20	person	500	20,000		10,000	10,000	
	Accommodation-	31.1	70	70	person	100	14,000		7,000	7,000	
	Meeting room renting	61	2	2	day	800	3,200		1,600	1,600	
	Purchase a digital camera	44	1		item	1,000	1,000		1,000		
Subtotal							44,800		22,300	21,300	600 600

Output 6	Publishing the China's Forest Products Market Information monthly in both Chinese and English										
A6.1	Engage 12 correspondents										
	12 correspondents	12.2	12	12	Month	150	43,200		21,600	21,600	
A6.2	Collect materials and solicit contributions										
	Raw materials	51	6000	6000	Page	0.2	2,400		1,200	1,200	
A6.3	Editing and translation										
	editing	21	120	120	Page	20	4,800		2,400	2,400	
	Translation	21	120	120	Page	80	19,200		9,600	9,600	
A6.4	Printing, publishing and disseminating										
	Printing	22	600	600	Copy	5	6,000		3,000	3,000	
	Dissemination	22	600	600	Copy	4	4,800		2,400	2,400	
Subtotal							80,400		40,200	40,200	
Non-acti vity based expense	International consultant										
	Consultant fee	14		30	Day	10,000	10,000			10,000	
	International travel	32.2		1	Round trip	3,000	3,000			3,000	
	Accommodation	31.2		30	Day	200	6,000			6,000	
	Domestic field trip	33.2		2	time	800	1,600			1,600	
	Audit costs	62	1	1	time	2,500	5,000			2,500	2,500
	Contingencies	63	1	1	time	1,000	2,000			1,000	1,000
	EA management costs	70	1	1	time	32,130	64,260			32,130	32,130
	Project monitoring & administration (ITTO)	80	1		time	45,208	45,208		45,208		
Subtotal							137,068		45,208	20,600	35,630
Total							537,868		135,258	193,350	79,130

3.4.2 Consolidated budget by component (US\$)

Category	Description	Total	Year 1	Year 2
10	Project personnel			
11.1	Project Coordinator	36,000	18,000	18,000
11.3	Market expert	48,000		48,000
12.1	Project assistant	39,000	18,000	21,000
12.2	Correspondent	43,200	21,600	21,600
13	National consultant	3,000		3,000
14	International consultant	10,000		10,000
19	Subtotal	179,200	57,600	121,600
20	Sub-contract			
21	Sub-contract-compile & translation	59,100	14,700	44,400
22	Sub-contract-printing & dissemination	37,200	5,400	31,800
29	Subtotal	96,300	20,100	76,200
30	Travel			
31.1	DSA for national expert	35,600	14,000	21,600
31.2	DSA for international consultant	6,000		6,000
31.3	DSA for others	17,600	7,000	10,600
32.1	International travel for national expert	6,000		6,000
32.2	International travel for international consultant	3,000		3,000
33.1	Local transportation cost for national expert	16,000	7,500	8,500
33.2	Local transportation cost for international consultant	1,600		1,600
33.3	Local transportation cost for others	32,400	13,000	19,400
39	Subtotal	118,200	41,500	76,700
40	Capital items			
44.1	A digital camera	1,000	1,000	
44.2	A projector	1,000	1,000	
49	Subtotal	2,000	2,000	
50	Consumable items			
51	Raw materials	5,400	2,800	2,600
53	Utilities	12,000	6,000	6,000
54	Office supplies	3,900	1,950	1,950
59	Subtotal	21,300	10,750	10,550
60	Miscellaneous			
61	Sundry	4,400	1,600	2,800
62	Audit costs	5,000	2,500	2,500
63	Contingencies	2,000	1,000	1,000
69	Subtotal	11,400	5,100	6,300
70	Executing agency management costs			
71	Costs(15% of total of overall project budget by activity)	64,260		
79	Subtotal	64,260		
80	Project monitoring & administration			
81	ITTO Monitoring and review	10,000		
82	ITTO mid-term evaluation/ITTO ex-post evaluation	-		
83	ITTO program support costs (12% on item10-82 of the ITTO budget)	35,208		
89	Subtotal	45,208		
100	GRAND TOTAL	537,868		

3.4.3 ITTO yearly budget by component (US\$)

Category	Description	Total	Year 1	Year 2
10	Project personnel			
12.2	Correspondent	43,200	21,600	21,600
13	National consultant	3,000		3,000
14	International consultant	10,000		10,000
19	Subtotal	56,200	21,600	34,600
20	Sub-contract			
21	Sub-contract-compile & translation	59,100	14,700	44,400
22	Sub-contract-printing & dissemination	37,200	5,400	31,800
29	Subtotal	96,300	20,100	76,200
30	Travel			
31.1	DSA for national expert	35,600	14,000	21,600
31.2	DSA for international consultant	6,000		6,000
31.3	DSA for others	17,600	7,000	10,600
32.1	International travel for national expert	6,000		6,000
32.2	International travel for international consultant	3,000		3,000
33.1	Local transportation cost for national expert	16,000	7,500	8,500
33.2	Local transportation cost for international consultant	1,600		1,600
33.3	Local transportation cost for others	32,400	13,000	19,400
39	Subtotal	118,200	41,500	76,700
40	Capital items			
44.1	A digital camera	1,000	1,000	
44.2	A projector	1,000	1,000	
49	Subtotal	2,000	2,000	
50	Consumable items			
51	Raw materials	5,400	2,800	2,600
54	Office supplies	900	450	450
59	Subtotal	6,300	3,250	3,050
60	Miscellaneous			
61	Sundry	4,400	1,600	2,800
69	Subtotal	4,400	1,600	2,800
70	Executing agency management costs (see executing agency budget)			
80	Project monitoring & administration			
81	ITTO Monitoring and review	10,000		
82	ITTO mid-term evaluation/ITTO ex-post evaluation	-		
83	ITTO program support costs (<u>12%</u> on item10-82 above)	<u>35,208</u>		
89	Subtotal	45,208		
100	GRAND TOTAL FOR ITTO	328,608		

3.4.4 Executing agency yearly budget by component (US\$)

Category	Description	Total	Year 1	Year 2
10	Project personnel			
11.1	Project Coordinator	36,000	18,000	18,000
11.3	Market expert	48,000		48,000
12.1	Project assistant	39,000	18,000	21,000
19	Subtotal	123,000	36,000	87,000
50	Consumable items			
53	Utilities	12,000	6,000	6,000
54	Office supplies	3,000	1,500	1,500
59	Subtotal	15,000	7,500	7,500
60	Miscellaneous			
62	Audit costs	5,000	2,500	2,500
63	Contingencies	2,000	1,000	1,000
69	Subtotal	7,000	3,500	3,500
	TOTAL	145,000	47,000	98,000
70	Executing agency management costs			
71	Costs(15% of total of overall project budget by activity)	<u>64,260</u>		
100	GRAND TOTAL FOR EXECUTING AGENCY	<u>209,260</u>		

3.5 Assumptions, risks and sustainability

3.5.1 Assumptions and risks

The main assumptions that will guarantee the success of the project are that the macro-economic and social policies of the country are maintained, that there is stability in the forest policy and trade policy, that the government officials, researchers, manufacturers, traders and other social stakeholders would like to actively participate in the project, and would like to provide and share information in a timely manner, that consumers will become more interested in consuming forest products from legal origin.

This project will involve collaboration with many domestic and international institutions and there are risks of failed cooperation. Fortunately for the data and information collection there is more than one possible source so the risk of delay or failed collaboration can be mitigated. For the sake of timely accomplishment of the planned objectives the project will require collaboration from domestic departments. The project will also need the support of Chinese government organizations in order to collect materials. The risks of failure in this respect can be mitigated as the project executing agency has established good cooperation relationships with them through previous projects in this field. Therefore, no major risk is foreseen.

3.5.2 Sustainability

At present, forest products market and international trade is one of the most important research fields of RIFPI. SFA has allocated related projects to RIFPI, which ensure the sustainability of market information collection and trade database. The project will liaise with government agencies and other civil society organizations to continue to provide support for the manufacturers and traders of tropical wood products beyond the lifespan of the project.

Through implementing the project, project team will established closer relationship with international organizations and foreign research institutes, the project team will continue to keep information exchange with them, so as to distribute updating international market information to domestic stakeholders.

In addition, the capacity of the ITTO supported Tropical Forest Product Information and Consultation Center of China will be further enhanced through the project, its resource and information base will expand, its links with stakeholders will also become closer and closer. All these will lay a good foundation for future following up research on market of tropical wood products in China.

In the end, experiences from the project will be shared with local and international partners to continue to support the capacity building of statistical data collection and verification, forecasting model building and application, Meanwhile, the project team will make great efforts to create opportunities to disseminate the project results, with the goal of improving the accuracy of statistical data and the transparency of wood product market in China.

PART 4. IMPLEMENTATION ARRANGEMENTS

4.1 Organization structure and stakeholder involvement mechanisms

4.1.1 Executing agency and partners

The Research Institute of Forestry Policy and Information (RIFPI) of Chinese Academy of Forestry (CAF) will be responsible for the implementation of the project through a steering committee made up of representatives of the government, the industry association and organized civil society. During the implementation of the project, the participation of various forest-related stakeholders will be ensured, especially the key stakeholders including government statistics departments, customs, forest industry associations (CNFPPIA, CTWPDA) and private sectors (such as producers, traders and consumers). These interested parties will be involved in work meetings, training, information exchange, and national and international trade workshops, with a view to ensure the successful implementation of the project.

In addition, the Center for International Forest Product Trade (CINFT) of SFA, which is affiliated to RIFPI of CAF, will be an important partner. The full participation of researchers from CINFT in project implementation will not only ensure the verification and reliability of data and information on wood product markets, but also promote the findings made by the project to be adopted by government agencies as soon as possible.

4.1.2 Project management team

Under the guidance of MOC and SFA, the project will be implemented by the Research Institute of Forestry Policy and Information (RIFPI) of CAF. The institute is responsible for the research of policy, development plan and information in the national forestry system, it is also a unit engaging in the research of international forestry, and is a key institution to provide information and consulting services to domestic and foreign relevant organizations as well as companies and enterprises. Over the years, domestic and world forest product industry development and its market variations is all the time one of the institute's key research projects. The key members of the project has participated in the formulation of the state forestry medium and long-term development plans (including Eighth Five-year, Ninth Five-year and Tenth Five-year forestry plans and 2001-2010 forestry plan as well as the formulation of major forestry policies (including industrial policy and science and technology one). In addition, the project's key members has collaborated with ITTO, FAO and other international organizations a number of time, and has well accomplished their assignments.

The project management team will be set up by the executing agency- RIFPI in order to ensure successful implementation of the project. The team will include a project director, a project coordinator, a monitoring officer from SFA and a professional assistant. In addition, 12 correspondents from project areas will be selected through consulting stakeholders, who will provide administrative support for the project at the provincial level.

4.1.3 Project steering committee

A Steering Committee will be established at the highest level of the project organization structure. This Committee will be responsible for supervising the project, reviewing and approving budget expenditures, and reviewing the implementation of activities. The Committee will be made up of a representative from SFA, MOC, ITTO and CNFPPIA. The project coordinator will act only as the Secretary of this Committee.

4.1.4 Stakeholder involvement mechanism

Project stakeholder involvement is essential for the successful execution of the project. It would be impossible to make an objective and correct forecast of tropical wood product markets without their active participation.

The primary project stakeholders are as bellows:

Government agencies: State Forestry Administration (SFA), Ministry of Commerce (MOC), General Administration of Customs (GAC), National Bureau of Statistics (NBS) etc.

Research institutes: CAF, CINFA (Center for International Forest Trade Study), Beijing Forestry University, South-east Forestry University

Associations: CNFPPIA, CTWPDA

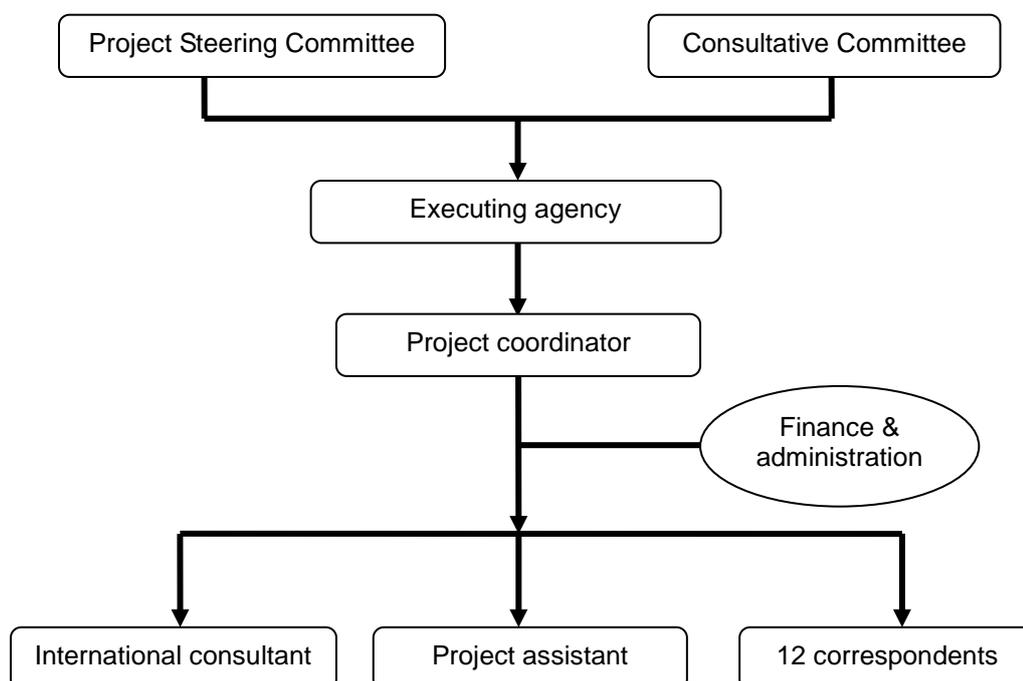
Private sector: manufacturers, traders, wholesale markets and retail markets

Representatives from different stakeholders will actively participate in project activities, some of them will be the members of project steering committee. Project interactions with these stakeholders will mainly take place through coordination meetings and their participation in the consultative committee. These mechanisms will help primary beneficiaries to acquire more knowledge and information on the forest product markets and related trade at the national and international levels.

Secondary project stakeholders are mainly NGOs, private institutions interested in the forest product markets and related trade, forest enterprises and relevant authorities in the forest sector that will be directly and indirectly involved in accordance with the requirements of the different project activities.

In addition, 12 correspondents from project areas will be selected through consulting stakeholders, who will play the role to encourage local manufacturers, traders and markets operators to be involved in the different project activities.

The project organization chart is shown below:



4.2 Reporting, review, monitoring and evaluation

The following reports will be submitted to ITTO:

- Inception report (upon project approval)
- Yearly plan of operation (together with the inception report)
- Progress report (by 28 February and 31 August of each year and/or 4 weeks before the date of a review and monitoring mission, including technical and financial progress reports)
- Financial reports (on an annual basis and upon project completion)
- Project completion reports (within three months of project completion)

A basic monitoring system will be applied that will include internal and external monitoring procedures as described below.

Internal monitoring system will be conducted by the project management team to ensure timely project implementation and adaptive management, which will include the following aspects:

- Follow up of commitments resulting from the agreement between ITTO and the Executing Agency;
- Progress and adequate execution of work;
- Timely delivery and quality of outputs;

- The extent to which the specific objective has been achieved;
- Internal financial audit.

External monitoring actions will be undertaken by ITTO. In the process of the project implementation, the project group will accept ITTO's monitoring, the best timing can be negotiated between the project group and ITTO's Committee on Economic, Statistics and Market. The purposes of this process will be as follows:

- To assess whether the project is proceeding according to the agreed work schedules, so that the necessary ITTO actions (e.g. disbursements to the Executing Agency) may be taken;
- To propose and participate in any necessary reviews of the project as a result of these assessments; and
- To report to the Committees and the Council on the implementation status and completion prospects for the project.

There will be an evaluation conducted at project completion to assess the attainment of set objectives. The evaluation of the project will be based on the systematic and objective collection of information, on the spot assessment and analysis of the validity, design, appropriateness, performance and the impact of the project. The ex-post evaluation will include the collection of information, field checks and an in-depth analysis of the performance and impact of the project after its completion, in order to assess the extent to which it achieved its purpose, determine its degree of effectiveness and efficiency, and evaluate its sustainability.

4.3 Dissemination and mainstreaming of project learning

4.3.1 Dissemination of project results

The Chinese government and the executing agency will give necessary support to disseminate project results through the organization of events, in particular, training courses and workshops, as well as documents in printed and/or digital formats to be published by the project and other market information to be posted on existing electronic platforms such as the website of The Center for International Forest Product Trade (CINFT) of SFA, so as to ensure widespread dissemination at the national and international levels. The project will also identify and develop innovative ways of dissemination, such as through meetings of industry associations, learning, sharing and assessment visits, and practical experience sharing. In addition, the project's professional staff will be available to users, both in person and through the internet, for additional enquiries and consultations.

4.3.2 Mainstreaming project learning

The effective mechanism for submitting the reports to the Chinese government policy makers has been established through implementing several ITTO projects. After the project completion, the standing China Tropical Forest Product Information and Consultation Center will continually be responsible for the collection, collation, exchange and consultation of China's tropical forest product information as well as the management of data bank and International Tropical Forest Product Information Exchange Network and other daily works. The center has been authorized by State Forestry Administration to be responsible for coordinating and checking the statistics data of China's tropical wood products. Many data in the PD55/99 Rev.1(M) report have been admitted by the authorities. Of which comments and recommendations on "Tax Rules" has been adopted by Chinese responsible department "Ministry of Finance" and has been implemented as of January 2003.

In the process of the project implementation, the project steering committee will meet regularly to plan, review and monitor implementation of activities during which most significant change and success stories will be recorded for sharing. The project will also facilitate platforms for learning and sharing from The Center for International Forest Product Trade (CINFT) of SFA contributing to achievement of project goal. Findings, results, and experiences shall be widely disseminated to project beneficiaries and all interested stakeholders including general public through the print and electronic media, websites, emails, conferences and during implementation of activities.

Annex 1 Profiles of the Executing and Collaborating Agencies

● The Research Institute of Forestry Policy and Information (RIFPI)

The Research Institute of Forestry Policy and Information (RIFPI), officially founded under the Chinese Academy of Forestry (CAF) in February 1964, is a vice-department-level public research organization specifically engaging the policy research on forestry and related information service.

Since the 1990s, the RIFPI has continuously expanded its research and consulting focuses, and won relatively strong disciplinary advantages in terms of macro forestry strategy and planning, valuation of forest ecosystem services and green GDP, forest product market and trade, collective forest tenure reform, state-owned forest management system, forestry cooperative economy, participatory development and community forestry, forest certification and sustainable management, environment management for plantation forest, forestry policy on climate change, forestry history and ecological culture, network information sharing, management of forestry intellectual property, digital library construction and so on. The RIFPI has been regarded as the “China's forestry development strategy think-tank”, which plays an important role on providing services for government decision-making, science and technology innovation and industry development. The RIFPI always pays attention to international cooperation and communication. It has maintained and developed close cooperation with international organizations such as FAO, ITTO and WWF as well as some countries and regions like the EU, Germany, Finland and Japan. After 2006, the RIFPI has executed more than 50 international cooperation projects, mainly funded by FAO, ITTO, Ford Foundation, the EU, the Nature Conservancy, German Tech-Cooperation Company (GIZ), Rainforest Alliance, Japan International Cooperation Agency (JICA), the UK Department for International Development (DFID) and the other international organizations.

It should be pointed out that, in the field of consulting services, The RIFPI has sponsored or organized more than 10 important international conferences and training workshops, including the Sino-Finnish High-Level Forum on Rural Forestry Reform and Sustainable Forest Management, the side event Forest Carbon Management Beyond 2012 at the second Asian-Pacific Forestry Week of FAO, and the Training Course on Desertification for African Countries. Four scientists from the RIFPI hold posts in international organizations and 6 scientists act as the evaluation experts of major international cooperation projects for the Ministry of Science and Technology.

In recent 10 years, it has implemented a number of research and consulting projects on sustainable land management, especially the land degradation control, which involved the studies related to capacity building, partnership development strategy, land degradation control demonstration sites, benefits to farmers and shepherds, REED+ policy, public-private partnership and policy system for sustainable land management. Among these projects, there were 9 projects that were funded and supported by CPMO. The successful implementation of these projects lays a critical foundation for completing the tasks set out in Phase 1 and 2 of PRC-GEF Partnership on Land Degradation in Dryland Ecosystems Projects.

After 50 years' development, the RIFPI has grown into a research institution engaged in comprehensive basic research and public services. It is a renowned organization to support government decision-making, forestry economic, consulting and information service, forestry strategy and policy research, which enjoys a high international reputation, cultivated a high title, highly educated, professional, younger team of research and consulting. It has become a consulting center for national forestry science and technology literature, national forestry science and technology information research and national forestry science and technology novelty search, promote science and technology innovation and boost international communications and exchanges.

● The Center for International Forest Product Trade (CINFT) of SFA

The Center for International Forest Product Trade (CINFT) of SFA is an institution specializing in policy consultations and research on the international market of and trade in forest products. The institution was established with the guidance and support of the Department of Development Planning and Assets Management of SFA; a panel of experts with extensive market research experience on forest products and strong science and technology R&D credentials; a powerful professional database and a comprehensive collection of books and materials; and relevant authorities of SFA.

The main mission of the Center is undertaking trade policy research on forest products, technical support for trade negotiations, analysis on trade alerts, and trade market consultations, thereby providing recommendations for China's forest product trade decisions, offering consultation services for outbound forest products, and building a multi-stakeholder communication platform for the government, enterprises, associations and domestic and foreign forestry institutions, so as to facilitate the sustained development of China's trade in forest products.

Annex 2 Tasks and Responsibilities of Key Experts Provided by the Executing Agency

Project Coordinator

The Project Leader has overall responsibility of the project. Her responsibilities will include the following.

- Responsible for project planning and execution;
- Develop a detailed work plan;
- Assign responsibilities and targets to the project staff;
- Prepare and ensure prompt delivery of project reports to ITTO.

Project Assistants (Forestry and Capacity Building Experts)

The project assistants work under the project coordinator and will be responsible for:

- The day-to-day running of activities of the project;
- Program development;
- Administration and office support;
- Organizing training courses.

Curricula Vitae of the Key Staff

Hu Yanjie Doctor's degree, associate research fellow, majored in forestry economics, familiar with English, has participated in a number of research studies of national forestry policy and development strategy, and has completed a series of international cooperative projects. Dr. Hu will be the coordinator of the project group, in charge of the project's implementation.

Ye Bing Doctor's degree, assistant director of Research Institute of Forestry Policy and Information, CAF, familiar with English, has participated in a number of research studies of national forestry policy and development strategy, and has completed a series of international cooperative projects. Dr. Ye will be in charge of training and consumers' survey.

Shi Kunshan Research fellow, ex-director of RIFPI, majored in forestry, is familiar with English and is in charge of a number of research projects in collaboration with FAO, ITTO, Ford Foundation and other international organizations and institutions. He will assist the coordinator of the project to accomplish trade policy analysis.

Tan Xiufeng Assistant research fellow, now is responsible for contributing articles to "Market Information Services" of ITTO regularly. She majored at forestry and familiar with English; she will be in charge of editing newsletter, statistics and data analysis.

Annex 3 Terms of Reference of Personnel and Consultants and Sub-contracts Funded by ITTO

Terms of Reference for the International Consultant

The Research Institute of Forestry Policy and Information of the Chinese Academy of Forestry is to undertake a study on the China's wood demand and supply entitled "THE TRENDS OF CHINESE WOOD PRODUCT MARKETS AND THEIR DEPENDENCE ON INTERNATIONAL TRADE OF TROPICAL TIMBER TOWARDS 2030"(PD 858/17 (M)). To implement the project successfully and submit a quality final report to ITTO and provide relevant policy makers of the Chinese Government with an effect policy consultation for policy consideration, the project implementing agency, the Chinese Academy of Forestry will require the services of an international market information specialist. The terms of reference for the international consultant is identified as below:

A. Qualification of the international consultant

- A Doctor degree in Natural Resources, Economy or related fields;
- Coming from an English speaking country/region;
- More than ten years of working experience on wood situation analysis and forecasting;
- Rich knowledge and experience in forecasting models of forest product trade, Chinese and global tropical timber products situation;
- Good track record of undertaking similar assignments.

B. Responsibilities of the international consultant

- To provide expert advices for smooth running of the project;
- To collect related materials on forecasting models, discuss the forecasting model on wood demand and supply with project team to select the suitable one;
- To contribute to the investigation of the domestic wood and wood products markets and manufacturing enterprises and questionnaire survey of consumers' preference, so as to gain a good background of the wood products production and consumption in China to be applied in final report formulation.
- To provide training for domestic market researchers and statistic experts in forest sector;
- To provide expert advices on appropriate statistical techniques in China;
- To assist project team to collect information and data on forest resources, forest policy, wood production and trade of China's key traders;
- To help in promoting linkages and information exchanges between the Tropical Forest Product Information and Consultation Center of China/project team and related international organizations;
- To advise and assist project team with layout of the structure of the final report, as well as to assist with amendment and polishing of the English version of final report.

C. Working duration

The duration of service for the international consultant is 30 days.

Intended starting date: the first quarter of the second year

D. Work plan

The international consultant will begin the assignment in his/her home country by reviewing the draft structure of final report worked out by the project team and make comments.

The consultant will come to China and work together with the project team for two weeks to participate in investigations of wood markets, ports and manufacturers and to advise on the work plan for enlarging and improving the information network, during the final stage of project implementation to assist with structuring and editing the final report.

Terms of Reference for Correspondents

The Research Institute of Forestry Policy and Information of the Chinese Academy of Forestry is to undertake a study on the China's wood demand and supply entitled "THE TRENDS OF CHINESE WOOD PRODUCT MARKETS AND THEIR DEPENDENCE ON INTERNATIONAL TRADE OF TROPICAL TIMBER TOWARDS 2030"(PD 858/17 (M)). To implement the project successfully and submit a quality final report to ITTO and provide relevant policy makers of the Chinese Government with an effect policy consultation for policy consideration, the project implementing agency, the Chinese Academy of Forestry will engage 12 specially invited correspondents. The terms of reference for these correspondents is identified as below:

A. Qualification of the correspondents

- Rich experience on forest statistic or wood products market or forest industry in China;
- Enough spare time to work for the project;
- Strong responsibility for work;
- Good communication skill with team work spirit;
- Close relationship with policy makers, or associations, or manufacturers and traders in forest sector.

B. Responsibilities of the correspondents

- To provide forest products information timely to assist publishing the China's Forest Products Market Information in both Chinese and English (Output 6);
- To assist project team to conduct domestic market investigations;
- To assist project team to conduct questionnaire survey of consumer's preference;
- To help project team to select typical enterprises for case studies;
- To provide updated statistical data on wood products production and consumption in province level or country level;
- To consult with local stakeholders and feedback to project coordinator in time;
- To participate in the training courses and workshops held by the project;
- To assist project team to disseminate project reports and newsletters.

C. Working duration

The working duration is the whole project duration, 24 months.

D. Schedule

The correspondents should provide market information on local forest products to Prof. Hu Yanjie at the beginning of every month.

Terms of Reference for National Consultants

The Research Institute of Forestry Policy and Information of the Chinese Academy of Forestry is to undertake a study on the China's wood demand and supply entitled "THE TRENDS OF CHINESE WOOD PRODUCT MARKETS AND THEIR DEPENDENCE ON INTERNATIONAL TRADE OF TROPICAL TIMBER TOWARDS 2030"(PD 858/17 (M)). To implement the project successfully and submit a quality final report to ITTO and provide relevant policy makers of the Chinese Government with an effect policy consultation for policy consideration, the project implementing agency, the Chinese Academy of Forestry will require the services of national consultants. The terms of reference for the national consultants is identified as below:

A. Qualification of national consultants

- Senior professional title;
- Well-known experts in the fields of forest products market and trade, forestry statistics;
- Rich knowledge and experience in forestry polices or forest industry or forest products trade;
- Good track record of undertaking similar assignments.

B. Responsibilities of national consultants

- To advise and assist project team with layout of the structure of the final report;
- To review the final report and provide comments and suggestions for revising the report;
- To assist project team to collect reliable information and data on forest resources, forest policy, wood production and trade.

C. Working duration

The duration of service for every national consultant is two days.

Terms of Reference for Translation

The Research Institute of Forestry Policy and Information of the Chinese Academy of Forestry is to undertake a study on the China's wood demand and supply entitled "THE TRENDS OF CHINESE WOOD PRODUCT MARKETS AND THEIR DEPENDENCE ON INTERNATIONAL TRADE OF TROPICAL TIMBER TOWARDS 2030"(PD 858/17 (M)). To implement the project successfully and submit a quality final report to ITTO, the project implementing agency, the Chinese Academy of Forestry will outsource the translation. The terms of reference for translation is identified as below:

A. Qualification of translators

- A Master degree in English or overseas study experience in English speaking countries;
- More than ten years of translating experience from Chinese to English;
- Rich knowledge in forestry industry and trade;
- Strong responsibility for work;
- Good track record of undertaking similar assignments.

B. Responsibilities of translators

- To finish translation work according to the agreed time;
- To double check the translated documents to ensure no misspelled words in the submitted documents;
- To ensure the accuracy and idiomaticness of English in the translated documents;
- To sign the confidential agreement with CAF and promise not to spread the materials that we offer outside in any form.

Terms of Reference for Printing

The Research Institute of Forestry Policy and Information of the Chinese Academy of Forestry is to undertake a study on the China's wood demand and supply entitled "THE TRENDS OF CHINESE WOOD PRODUCT MARKETS AND THEIR DEPENDENCE ON INTERNATIONAL TRADE OF TROPICAL TIMBER TOWARDS 2030"(PD 858/17 (M)). To implement the project successfully and submit a quality final report to ITTO, the project implementing agency, the Chinese Academy of Forestry will outsource the printing. The terms of reference for printing is identified as below:

A. Qualification of printing

- Qualified Business license issued by government agency and modern printing equipment;
- More than five years of printing experience;
- Strong responsibility for work;
- Good track record of undertaking similar assignments.

B. Responsibilities of printing

- To finish printing work according to the agreed time;
- To double check the printed materials to ensure high printing quality without print mottle;
- To sign the confidential agreement with CAF and promise not to spread the materials that project team offers outside in any form.

Annex 4 Assessment by the Fifty-second Expert Panel

A) Overall Assessment

All the points noted by the expert panel have been addressed in this revised proposal. As a result, the whole project proposal has been checked according to recommendations made by the fifty-second expert panel. The amendments are indicated in **bold** and underline letters in this revised proposal.

B) Specific Recommendations

1	Present a map which clearly reflects the main production areas, the main processing areas and main consuming areas	Maps and detailed information on the main production areas, the main processing areas and main consuming areas have been added (please see page 5-7).
2	Quote and list the related ITTA objectives (Objective d, e, k) and ITTO Strategic Action Plan Priorities (Priority 1, 2, 4, 5)	The related ITTA objectives (Objective d, e, k) and ITTO Strategic Action Plan Priorities (Priority 1, 2, 4, 5) have been quoted and listed in the revised proposal (please see page 2-3).
3	Provide more basic information in the social, cultural, economic and environmental aspects – add information on forest leasing systems and cutting rights	More basic information in the social, cultural, economic and environmental aspects has been added, including information on forest leasing systems and cutting rights in the revised proposal, please see page 8-11.
4	Modify the expect outcomes, elaborating on expected outcomes after the project implemented rather than the outputs achieved	The expect outcomes have been modified and could be found on page 11-12.
5	Refine the problem analysis including elaborating the effects of the key problem and the problem tree respectively	The problem analysis has been refined, including adding the effects of the key problem, elaborating the problem tree and the solution tree, please see relevant pages of the revised proposal (please see page 16-19 and page 21).
6	Keep consistency among different budget tables including the total amount and increase ITTO programme support costs from 8% to 12%	<ol style="list-style-type: none"> 1) The audit cost and contingencies has been added in the Master Budget (see page 31), accordingly the “executing agency management cost” was change from 63,210 US\$ to 64,260 US\$ (please see page 31, 32, 34); and “ITTO program support costs (12% on item 10-82 above) was changed from 40,129 UD\$ to 35,208 US\$ (please see page 32, 33). 2) The revised budgets for “executing agency management cost” and “project monitoring & administration” were added in the Master Budget (see page 31), therefore, the total budget in the Master Budget reaches 537,868 US\$, which is consistent with the total budget in consolidated budget by component (please see page 32). 3) The total ITTO contribution decreases 4,921 US\$ to 328,608 US\$ (please see page 33). 4) The total China contribution increases US\$ 1,050 to US\$ 209,260 (please see page 34).

7	Add the terms of reference for national consultant and sub-contractions funded by ITTO in Annex 3. Elaborate more detailed responsibilities for the correspondents	<p><u>The terms of reference for national consultant and sub-contractions (translation and printing) funded by ITTO have been added in Annex 3 (please see page 41~46).</u></p> <p><u>The terms of reference for international consultant and correspondents have been modified, more detailed responsibilities for the correspondents have been elaborated (please see page 41~43).</u></p>
8	Correct the title in the cover page from the year 2020 to 2030	The title has been corrected in the cover page from the year 2020 to 2030.