

**TRAFFIC**

**R E P O R T**

JULY 2015

# ENGAGING CHINA'S PRIVATE SECTOR

in sustainable management of medicinal plants  
—the multiplier effect

*Project policy report*



## TRAFFIC REPORT

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The second traditional Chinese medicine corporate social responsibility and sustainability Forum discussion, Hangzhou, China, April 2015

# TABLE OF CONTENTS

<b>I.</b>	<b>List of abbreviations</b> .....	<b>3</b>
<b>II.</b>	<b>Executive Summary</b> .....	<b>4</b>
<b>III.</b>	<b>Purpose of Project</b> .....	<b>7</b>
<b>IV.</b>	<b>Policy Aspects</b> .....	<b>10</b>
	Policy review methodology.....	10
	Relevant policies, regulations, standards and best practices.....	11
	Review of strengths and weaknesses of China’s existing law, regulation, standard and best practices.....	11
	Analysis of gaps between current laws, regulations, industry policies standards/practice and their implementation .....	15
	Towards better environmental governance: EGP MAPs project experience .....	17
<b>V.</b>	<b>International experience</b> .....	<b>19</b>
	Protection of habitats and species: international framework .....	20
	Protection of habitats and species within Europe .....	21
	European national legislation .....	21
	Experiences promoting sustainable use and trade of MAPs in Europe: The FairWild Standard.....	22
	Lessons and conclusions.....	23
<b>VI.</b>	<b>Policy implications and recommendations</b> .....	<b>23</b>
<b>VII.</b>	<b>Reference list</b> .....	<b>28</b>
<b>VIII.</b>	<b>Annex 1. Policy review consultancy Terms of Reference</b> .....	<b>29</b>
<b>IX.</b>	<b>Annex 2. The list of reviewed China’s Regulations and Industrial Policies applicable to Collection, Management and Use of Medicinal Plant Resources</b> .....	<b>34</b>
<b>X.</b>	<b>Annex 3. The policy recommendations consultation inquiry format and most commonly received comments</b> .....	<b>38</b>
<b>XI.</b>	<b>Annex 4. Policy proposal to the National People’s Congress and to the Chinese People’s Political Consultative Conference (in Chinese)</b> .....	<b>39</b>
<b>XII.</b>	<b>Annex 5. Text of TRAFFIC’s CBD CoP12 intervention</b> .....	<b>43</b>

# I. LIST OF ABBREVIATIONS

CBD	Convention on Biological Diversity
CoP	Conference of the Parties
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMPMA	Chinese Medical and Pharmaceutical Material Association
CPPCC	Chinese People's Political Consultative Conference
CSR	Corporate Social Responsibility
ECBP	European Union–China Biodiversity Programme
EGP	China Environmental Governance Programme
EGP MAPs	Acronym for the project: ‘Engaging China’s private sector in sustainable management of medicinal plants—the multiplier effect’
ESPC	European Strategy for Plant Conservation
EU	European Union
FDA	Food and Drug Administration
GACP	Good Agricultural and Collection Practices
GAP	Good Agricultural Practices
GSPC	Global Strategy for Plant Conservation
ISEAL	ISEAL Alliance, the global membership association for sustainability standards
ITC	International Trade Centre
IUCN	International Union for the Conservation of Nature
MAP(s)	Medicinal and aromatic plant(s)
MEP	Ministry of Environmental Protection
NGO	Non-governmental organization
PES	Payment for ecosystem services
PP	Partnership project
SATCM	State Administration of TCM
SFA	State Forestry Administration
SSC	IUCN Species Survival Commission
SME	Small and medium-sized enterprise
TCM	Traditional Chinese Medicine
TUGRMM	International Trade Union of Genuine Regional Materia Medica
WCCM	World Congress of Chinese Medicine
WFCMS	World Federation of Chinese Medicine Societies
WHO	World Health Organization
WWF	World Wide Fund for Nature
WWF CPO	WWF China Programme Office

## II. EXECUTIVE SUMMARY

Between 1 March 2013 and 31 July 2015, TRAFFIC – together with the World Federation of Chinese Medicine Societies (WFCMS), WWF China Programme Office (WWF CPO), and Zhejiang Wecome Pharmaceutical Co. Ltd (Wecome) – implemented the ‘Engaging China’s private sector in sustainable management of medicinal plants (EGP MAPs) - the multiplier effect’ project to build sustainable supply chains of medicinal plants in the Traditional Chinese Medicine (TCM) industry in Hunan and Zhejiang provinces, two important centres of TCM sourcing, trade and manufacturing.

In line with the aims of the EU-China Environmental Governance programme (EGP), and specifically the priorities for Lot 4 (Corporate Social Responsibility (CSR)), the EGP MAPs project is one of 15 Partnership Projects (PPs) aimed to *increase participation of TCM stakeholders in decision-making (laws, regulations and policy making) processes through communication between private sector, communities and governmental agencies to develop government policies favourable to green business practices*, in order to showcase good practices of environmental governance at the local level. The experiences of the PPs are intended to feed into recommendations for regulatory improvement, change or enhancement at the central governmental level through the Ministry of Environmental Protection (MEP).

The policy challenges relating to the production and trade in TCM plant ingredients are complex. Increasing demand in China and globally for TCM plant ingredients, combined with other pressures, has led to overharvesting and the decline of wild plant populations in China. Although the pressures on wild resources have been acknowledged, the policy and regulatory response has often been to ban the trade in threatened species, combined with a shift towards cultivation. This may not always be workable in practice, and also limits opportunities for sustainable trade which can provide incentives for resource management and nature protection, as well as contribute to livelihoods, and ensure the necessary ingredients for the TCM industry continue to be provided. Relations between TCM companies and harvesting communities are also difficult; pressures of rapid economic development and a predominantly price-driven purchasing culture can lead to issues of equity and quality being overlooked, undermining the reputation of one of China’s oldest and most valued industries. Long and complex trade chains involving many middlemen make it difficult to ensure the safety and quality of ingredients, and to ensure a fair price reaches those involved with collection on the ground – often some of the poorest and most marginalized people.

China has an extensive legal and regulatory framework applicable to the harvest and trade in plants used for TCM, as documented by a policy review study carried out under the project. The analysis identified 12 national laws, 10 administrative regulations, 29 departmental rules, 57 national industrial policies, 21 sectoral programmes and development outlines, 5 standards and practices, and 8 overlapping protection lists on the collection, management and use of medicinal plant resources in China. However, numerous challenges are found in the implementation; in translating general central level frameworks into workable systems at the provincial and local levels, and resolving overlapping and unclear responsibilities established by different laws and regulations. As noted, the policy direction is also more towards promotion of cultivation, with options for sustainable use of wild harvested species not yet fully explored.

This project aimed to develop working examples of sustainable use models in practice, to demonstrate that with the correct balance of conditions in place this can be a viable option for China. Further, to foster industry leadership on these initiatives and encourage a dynamic and open exchange of perspectives and experience

between different actors, including from the private sector, civil society groups and government agencies. The project has taken place in the context of a long-term shift in China towards a more market-oriented economy, and implementing industry leadership on CSR as well as the introduction of market-based tools such as standards and certification schemes. The project was conceived based on the understanding that a combination of approaches can be important in encouraging a society's transition towards environmental, economic and social sustainability. Laws provide an overall atmosphere and framework for achieving sustainability goals within a specific country or geography. Standards (which may have a compulsory or voluntary basis in law) can be helpful in implementing specific conventions, laws and other regulations. Standards are also important for helping companies meet the requirements of international markets. The project therefore also looked at the policy context and opportunities and challenges for the use of such tools in China, both through analytical work, and the project activities at local level.

The project activities focused primarily on working with the TCM private sector in China, in line with the emphasis of EGP's Lot 4 (CSR). With leadership and leverage from TCM manufacturers and traders, the project connected various stakeholders in the TCM industry, including companies, their suppliers (farmers and wild-collectors), conservation NGOs, industry associations and academia, as well as government. This project is the first of its kind; innovative in China and indeed globally in its leverage of the TCM industry commitment and resources to address issues of sustainability in the sector.

The project used the FairWild Standard (FairWild Foundation 2010) as a best-practice framework for sustainable wild harvesting and equitable trade in plants. The 11 principles of the FairWild Standard cover social, environmental and economic aspects of sustainability; a comprehensive framework for tackling the complex issues involved in sustainable wild collection.

Alongside the activities working with industry stakeholders, government agencies were engaged, both at local level (in relation to the activities in the provinces) and at central government level. This report contains a summary of the main findings and policy recommendations from the project. It is based on an analysis of the legal, regulatory and policy framework for the management of production and trade in TCM plant ingredients from China, as well as first-hand experiences of the project partners through the partnership project.

This report is organized into five chapters, starting from the Executive Summary, followed by an explanation of the purpose of the project and how it relates to the environmental policy context; an analysis of policy aspects relevant to the project; and a summary of relevant international experience. The report concludes with policy implications and recommendations.

In order to guide their implementation, the main recommendations in the final chapter of the report are designed targeting four distinct stakeholder groups that influence conservation, management, use and trade of wild medicinal plant resources in China:

- (1) **To legislative government agencies at all levels, and law enforcement agencies**<sup>1</sup>, the recommendations include the accelerated revision of existing legislation concerning TCM, in particular the *Regulations of Wild Medicinal Resources*, the clarification of the wild medicinal plant resources property regime and the collection permits system, ensuring non-discrimination of all resource users, the

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<sup>1</sup>Referring to China People's Congress – national legislative body, central and local government at all levels and enforcement agencies, such as forest police

strengthening of law enforcement for conservation and sustainable use, the capacity-building for the effective implementation of legislation at all levels, the support to the collaboration among different Ministries, the support to the use of the rigorous Non-Detriment Findings guidance for trade in CITES-listed species, and the inclusion of wild plant sustainable use and trade within the China Strategy for Plant Conservation, in line with China's CBD commitments.

(2) **To specialized government agencies responsible for enabling and implementing policies**<sup>2</sup>, the recommendations include setting up of the preferential mechanisms and favourable economic policies for sustainable performance of TCM and MAPs industry companies, and the conducting of a comprehensive economic valuation of China's wild medicinal plant resources, among others.

(3) **To relevant research institutions**, it is recommended to conduct nationwide surveys of medicinal plant resources, as well as a nationwide assessment of the conservation status of medicinal plants using widely recognized conservation tools, such as the IUCN Red List criteria, the establishment of pilots for conservation and sustainable use of wild plants, the compilation of the national programme for protection and sustainable use of medicinal plant resources.

(4) **And to companies and relevant industry associations**, the implementation of international best practices, the piloting of sustainable management practices certification that meet international benchmarks such as the FairWild Standard, the support to companies' introduction of risk analysis and resource assessment for the plant ingredients in their products, promote the sustainable consumption of TCM products and the importance of sustainable and legal sourcing of TCM ingredients among domestic and international consumers, and encourage the development of long-term relationships with wild-harvesting communities based on the principles of mutual respect and equitable trade, among others.

The recommendations concerning the rights and benefits for wild-harvesting communities and farmers as important stakeholders in the TCM sector, are incorporated throughout the relevant policy recommendations.

Beyond the TCM sector, the recommendations may be found useful to other sectors which are working towards environmental and social sustainability, including promoting the wider recognition and enabling environment for the adoption of international voluntary standards. They are also replicable beyond China; the review of international experience demonstrating that difficulties encountered with sustainable production, trade and consumption of plant ingredients are by no means unique to the Chinese context.

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<sup>2</sup> Referring to government agencies including SFA, SATCM, Ministry of Commerce, Ministry of Finance, and Tax Bureau



### III. PURPOSE OF PROJECT

Medicinal and aromatic plants (MAPs) are a valuable resource for their intrinsic biodiversity and ecosystem values, as a source of raw materials underpinning healthcare systems and industries, and as a source of income for harvesters.

The People's Republic of China (hereafter China) is the origin for, and biggest centre of, production of many plant materials used in Traditional Chinese Medicine (TCM). China produces a wide variety of plant-based herbal medicines and ingredients that are consumed both within China and worldwide. Over 70% of the different species used in TCM, and about 30% by volume, come from wild medicinal plants. These resources are under threat owing to overharvesting to meet high demand from the TCM and herbal products industry, as well as other factors such as land conversion and pollution. Poor management is not only threatening wild species but also the livelihoods of millions of collectors and indeed, the TCM healthcare system itself.

In addition to recognizing the need for working models of sustainable harvesting, China's policies promote cultivation of medicinal plants to alleviate the pressure on wild resources. However, the cultivation of medicinal plants brings new problems. While cultivation has increased over recent years, the emphasis has been on maximizing profits and minimizing length of growing seasons. There are instances of this resulting in environmental damage, while contamination (e.g. from heavy metals) poses potential risks to consumer health. Inappropriate cultivation methods and uncontrolled disposal of TCM production waste can cause soil deterioration and pollution; over-use of chemical fertilizer and pesticides not only harms the environment, but also leaves residues in the products. Quality assurance for medicinal plant products is therefore of concern. The lack of consumer confidence in the safety and quality of cultivated alternatives, as well as the preference of practitioners and the health products industry for wild-harvested ingredients, means that pressure on wild populations remains.

Internationally, the importance of sustainable use of biodiversity – contributing to human well-being and economic development – is recognized as one of the central tenets of the Convention on Biological Diversity (CBD); an agreement to which China is a Party. The private sector has an important role to play in the responsible management of these resources, and can also be a powerful vehicle for change, responding to consumer demand for sustainably produced products as well as regulatory pressure. Worldwide, a growing number of companies are taking leadership on responsible resource use and implementing sustainability initiatives with their suppliers. In China, Corporate Social Responsibility (CSR) is a burgeoning concept, and companies are demonstrating flexibility and openness to piloting new development strategies based on environmentally-friendly production.

The majority of existing public policies to date – and corresponding public and private investments – that are relevant to the trade and production of MAPs are focused on regulation of quality, safety and legality of the trade. Issues of production sustainability and equitable benefit sharing play a relatively minor role. There is limited experience at the local government level in China of how to support best practice in partnership projects, and support multi-stakeholder involvement in decision-making. Therefore this project also sought to strengthen the knowledge and awareness of local government agencies on sustainable use of wild MAP resources, promote formulation of economic and social policies that inspire businesses to participate in building a green economy and take leadership on sustainable use. It aimed to encourage further a consultative and

participatory policy making process with the participation of diversified stakeholders, especially the private sector within the TCM industry and their suppliers.

The action promoted the application of the Principles of the FairWild Standard (v 2.0)—an international Standard specifically developed to provide a framework for sustainable wild harvesting and equitable trade of MAPs. Covering environmental, social and economic aspects of sustainability, the FairWild Standard allows verification of practices to ensure sustainable collection and maintenance of wild plant populations, as well as social responsibility, and fair conditions of labour and pay. It is used as the basis of a third-party audited certification scheme, under implementation with market-leading companies globally. Beyond certification, the FairWild principles form the basis for the development of community resource management practices, sustainable resource management strategies and regulations. The FairWild Standard is recognized as the best practice framework for sustainable wild collection and equitable trade in the implementation toolkit of the CBD's Global Strategy on Plant Conservation (GSPC).

The EGP MAPs project was aligned to the policies of China, including at the central, provincial (in Hunan and Zhejiang provinces) and local levels; and addressed the challenges, priorities and demands of the project target groups and its beneficiaries. Overall, China at present puts great emphasis on environmental protection and sustainable development being in conjunction with economic growth, in particular through the concept and policy of Ecological Civilization (*Communist Party of China Central Committee, State Council of China. (2015). 'Opinions of the CPC Central Committee and the State Council on Further Promoting the Development of Ecological Civilization'*). A number of national- and local-level programs are being developed to put such concepts into practice. For example, the MEP-led Biodiversity and the Green Development International Forum in particular stresses the importance of multi-stakeholder engagement and the necessary commitment of industry and commercial entities, which the EGP MAPs project directly responded to. China is also experimenting with market-based tools, for example aiming for the TCM Good Agricultural Practices (GAP) system to become a market-based tool rather than an administrative system. Regarding voluntary standards systems, a number of industry sectors are taking the lead in advocating for the recognition of international best practice standards and labelling systems by the relevant government agencies in China – such broader efforts are also helping to create an opening and model for the implementation of the FairWild Standard with the TCM and natural ingredients sectors. Favourable economic policies (i.e. tax exemptions) to promote sustainability also have been piloted in China, to which this project contributed additional analysis through the project policy review and recommendations.

TCM industry sourcing practices and business behaviour can have a huge impact on the conservation of wild medicinal plants. The EGP MAPs unpublished project consultancy report 'Policy, Laws and Regulations for Collection, Management, and Sustainable Use of Medicinal Plant Resources' (Runhuai & Jiyong 2015) provides recent estimations of China's TCM resources. China is endowed with a rich resource base—12,807 types of TCM materials were found in the third National Survey of Chinese Medicine Resources, which included 11,146 medicinal herbs, 1,581 medicinal animals and 80 types of medicinal minerals. By the end of 2012, China had over 2,000 TCM companies with an annual turnover above CNY20 million (over USD 3.2 million), including 179 companies with an annual turnover of CNY100 million (over USD 16.3 million) and 25 companies with CNY1 billion (over USD163 million) or more. In 2012, the TCM industry's gross output was CNY515.6 billion (over USD84 billion), of which only a fraction was exported, primarily as raw medicinal and herbal product ingredients. Both private and State-owned TCM companies are active players in the TCM sector, and are responsive to changes in the policy environment.

Enabling a sound policy environment is a key driver for the private sector in the TCM industry to pursue sustainable development and shoulder its social responsibility. Conversely, a policy drawn from best practice and tested with the TCM industry (i.e. the pilot with TCM manufactures and traders in the project) will most likely be feasible and applicable in practice. The process of testing best practice/standards, learning the gaps, and summarizing the lessons for policy-making enable a participatory governance process, as formulated in the project's Objective 4: **To improve government awareness and capacity for sustainable management of wild medicinal plant resources, built through partnership with TCM private sector and other stakeholders.**

EGP MAPs was designed to be fully in line with the EGP PP Result expected for Lot 4 (CSR): *The private sector is engaged in proactive and sustainable practices and the use of market-based instruments has been increased.* Emphasis was placed on the adoption of voluntary standard systems and certification schemes, experimentation with labelling and consumer choice, which provide avenues for public participation and accountability (as prioritized under the EGP). EGP MAPs has responded to the corporate social responsibility (CSR) emphasis through supply chain standards and stakeholder engagement, development of the CSR Guidelines for the TCM sector and the elaboration of the company-level implementation Roadmaps.

To provide practitioners and stakeholders with information on the policies affecting the collection, management and use of medicinal plant resources, the project reviewed current laws, regulations, departmental rules and industrial policies on medicinal plant collection, management and use at international, national and local (Hunan province, Zhejiang province and Lishui municipality) levels (Runhuai & Jiyong 2015). The resulting report also analysed the gaps between the content of those policies, statutes and standards and the principles for sustainable use of wild resources, and their real-world implementation. Following further review and discussion, a series of recommendations were formulated, for government's reference in policy development and for companies in decision-making. Through those, the project anticipates to make significant contributions towards the protection and sustainability of Chinese medicinal resources, the improvement of wild-harvesters and farmers' livelihood, and the conservation of biodiversity.

Recommendations are expected also to feed into implementation and further updates of the "China National Plan for TCM plants protection and development 2015-2020" ([http://www.gov.cn/zhengce/content/2015-04/27/content\\_9662.htm](http://www.gov.cn/zhengce/content/2015-04/27/content_9662.htm))—a national plan published in April 2015 by the State Council. The plan, compiled by a total of 12 government agencies, consists of seven major tasks to be met between 2015 to 2020. These goals are aimed at better protection of wild TCM plants, a higher quantity and quality of cultivated plants, and a mature pricing mechanism.

The Plan has defined seven tasks abbreviated as below:

1. Carry out the fourth national survey of TCM resources and establish the dynamic monitoring network of TCM resources.
2. Construct a cultivation base for endangered and rare TCM plant resources.
3. Develop Chinese herbal medicine modernization production technology and approaches to the comprehensive utilization of TCM through technological innovation.
4. Modernize manufacturing by TCM enterprises and ensure systematic development of the industry
5. Improve the quality assurance system for TCM materials
6. In order to strengthen the reliability of TCM supplies, structure the production service system and construct a service network and service platform of production information.
7. Create a modern use/promotion system of Chinese herbal medicine and improve the related industry standard.

## IV. POLICY ASPECTS

As outlined above, the policy challenges facing China on the topic of sustainable production and trade in TCM plant ingredients are many, and require a multi-sectoral response. The project undertook a series of studies that – combined with practical experiences working with target groups in the selected provinces – have contributed to a sound understanding of the policy context and ultimately enabled formation of policy recommendations.

### **Policy review methodology**

In early 2014, TRAFFIC together with a consultant elaborated two important reports of policy relevance. They are: *FairWild Standard and Certification scheme in China feasibility report* and *A Review and Comparison of Relevant Medicinal Plant-Related Standards and Policies in China and Internationally*. These two unpublished project reports analysed the policy situation in China for TCM resource governance especially focusing on wild plants. The reports also included a comparison study of relevant standards for food and medicine, and explored the possible pathway for adopting a voluntary sustainable collection standard and certification scheme in China. As well as informing the design of actions to be undertaken with target groups in the pilot project sites, the reports provided reference material for further broad policy research and recommendations. They also fed into a subsequent collaboration with the International Trade Centre (ITC), analysing the international trade in wild botanicals from China and market opportunities for sustainable trade – another influential output from the project in terms of developing policy recommendations (International Trade Centre 2015).

Further, a consultant (ToR in Annex 1) was contracted by the project partners to complete the *Report on policy, laws and regulations for collection, management and sustainable use of medicinal plant resources* (unpublished project documentation). This consultancy report was developed based on project experience, stakeholder consultations, and case studies on best practice. It drew up all relevant international, national laws, policies, standards and best practice, as well as evaluating the effectiveness of implementation, and identifying gaps against the sustainability principles of the FairWild Standard and other relevant frameworks. In total, the review identified 12 national laws, 10 administrative regulations, 29 departmental rules, 57 national industrial policies, 21 sectoral programmes and development outlines, 5 standards and practices, and 8 overlapping protection lists on the collection, management and use of medicinal plant resources in China (see Annex 2 for the list of relevant regulations and policies). The resulting report made policy recommendations that would support sustainable development of the TCM industry and conservation of wild medicinal species, including recommendations to clarify policy coherence between the multiple existing regulatory instruments.

The draft report was subsequently circulated among various stakeholders in the TCM industry, government agencies, civil society groups and associations. The overall feedback to the report and its recommendations was that it provided a complete collection of documentation, an in-depth analysis, and practical and feasible recommendations. Detailed comments from government agencies were collected and adjustments made accordingly (see Annex 3 for the consultation inquiry format and most commonly received comments). Agencies providing comments included:

- The Department of Medical Administration in State Administration of Traditional Chinese Medicine of the People's Republic of China
- Traditional Chinese Medicine Office in the Department of Scientific and Technology
- Medicine Office in the Consumer Products Department of Ministry of Industry and Information Technology of the People's Republic of China

- National management Office of Importing and Exporting Endangered Species in the State Administration of Forestry
- Ecological Department in the Ministry of Environmental Protection of the People's Republic of China
- General Office in Chinese Pharmacopoeia Commission
- General Office in the Inspection Bureau in the China Food and Drug Administration
- National Medicine Department for Evaluation of New Drugs.

### **Relevant policies, regulations, standards and best practices**

At the international level, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention on Biological Diversity (CBD) provide the internationally agreed overarching principles and strategies for the conservation, management and use of medicinal plant resources. Accordingly, longer-term strategies are articulated in the Global Strategy for Plant Conservation (GSPC) and WHO Traditional Medicine Strategy: 2014-2023, and operationalized in the guidelines already or being formulated that include the FairWild Standard (version 2.0), WHO Guidelines on Good Agricultural and Collection Practices (GACP) for Medicinal Plants, and WHO Monographs on Good Agricultural and Collection Practices (GACP) for selected species (such as that published for *Artemisia annua* L).

In recent years, for conservation and management of medicinal plant resources, in particular the wild medicinal flora, China has promulgated or amended a large number of laws and regulations, regulatory measures, industrial policies, and standards and practices in line with the *CPC Decision on A Number of Major Issues in Comprehensively Carrying Forward the Rule of Country by Law* (23 October 2014, passed on the Fourth Plenary Session of the 18th Central Committee of the Communist Party of China). The protection and use of TCM resources has hence moved to the era of rule-based administration with applicable regulatory and punitive measures, which should greatly improve the effectiveness of resource protection and sustainable use.

Close scrutiny of postings on relevant official websites and a broad literature review enabled a total of 12 national laws, 10 administrative regulations, 29 departmental rules, 57 national industrial policies, 21 sectoral programmes and development outlines, 5 standards and practices, and 8 overlapping protection lists on the collection, management and use of medicinal plant resources in China to be identified (Runhuai & Jiyong 2015).

The review revealed that China has established a relatively comprehensive and layered system with laws and regulations, restrictive measures, strategic programmes, industrial policy incentives, standards and good practice. Policies and laws relevant to the provincial – Zhejiang and Hunan – levels were also reviewed, as well as the city (Lishui) levels.

### **Review of strengths and weaknesses of China's existing law, regulation, standard and best practices**

To conserve wild medicinal plant resources, promote cultivation of wild flora species, standardize and scale-up cultivation, and regulate manufacture, trade and use of medicinal materials, the central government of China has promulgated a wide array of laws, regulations and industrial policies, supported by provincial (municipal) rules, guidelines and measures. The adoption and enforcement of those statutes have significantly strengthened the protection of wild medicinal resources and their living environment, started a boom in the Chinese medicine

cultivation sector and helped pave the way to secure the medicinal plant supply as the material basis for TCM and the greater healthcare industries.

However, despite the existence of a comprehensive policy and regulatory framework, some important gaps remain in their coverage (as compared to international standards and best practice), including the details required for implementation, and the clarity of responsibility for implementation and the allocation of resources, as reviewed in the following sections.

Based on surveys at national, provincial (Zhejiang and Hunan) and municipal (Lishui in Zhejiang province) levels of policies, statutes and standards in relation to the protection and use of medicinal plant resources, and comparative studies of them with international conventions, policies, standards and frameworks concerning wildlife and especially medicinal herbs, this project assessed the strengths and complementarities, as well as the weaknesses and gaps between the current policies, statutes and standards of China, and the sustainability principles of wild medicinal plants, and the gaps between the policies, statutes and standards of China, and their implementation and the actual resource utilization status. Those analytical results serve as a rationale for the policy recommendations tentatively proposed by the project for strengthening (supplementing) the current regime. The project aims, with regulatory surveillance and policy leverage by the government, to guide and encourage companies and stakeholders of medicinal plant sources to adopt international standards of sustainable resource management, to roll out commercial practice for sustainable use of resources, and to attract companies and consortiums in the development of resource management standards and policies.

## **A. Strengths of China's existing law, regulation, standard and best practices**

### **A.1 China has established medicinal plant resources conservation and management institutions**

Over the past 40 years, China has established a systematic institutional chain for TCM plant resources conservation and management. With national and local stakeholders, industrial consortiums and research institutes involved, the chain combines the autonomous operation of TCM companies, supported by scientific research, industrial guidance, and government supervision, and has influenced in various ways the manufacture, processing, marketing, R&D and use of TCM materials. At the national level, for instance, conservation of the TCM resources is a Ministerial mandate of governmental departments responsible for agriculture, forestry and environmental protection; TCM plants cultivation is managed respectively by the Ministries of agriculture, forestry and industry and information; manufacture and processing is supervised by the Ministry of Industry and Information; trade is administered by industrial and taxation authorities; TCM healthcare services are managed by the State Administration of Traditional Chinese Medicine; scientific research is facilitated by Ministry of Science and Technology; and TCM quality surveillance is the responsibility of the Food and Drug Administration, quality supervision and inspection authority, and the Agriculture and Health ministries.

### **A.2 Comprehensive laws and policies on TCM resource conservation and management are available**

With the promulgation of a series of laws, regulations, rules, industrial policies and standards and good practices by the central and local governments, China has a strong legal and policy framework for protection and management of medicinal plant resources, especially wild herb resources.

For instance, the *Constitution of the People's Republic of China* sets force in Article 9 that “the State ensures the rational use of natural resources and protects rare animals and plants. Appropriation or damaging of natural resources by any organization or individual by whatever means is prohibited”.

The *Drug Administration Law of the People's Republic of China* regulates in Article 3 that “the State protects the resources of natural crude drugs and encourages the cultivation of Chinese crude drugs”.

*Law of the People's Republic of China on Traditional Chinese Medicines (Draft for Comment)* sets out in Article 28 that “the State protects the resources of medicinal wildlife, conducts dynamic monitoring and periodic screening, establishes a medicinal wildlife germplasm gene bank, designates natural reserves, encourages artificial cultivation/farming of medicinal wildlife, and supports the breeding and related research on rare and endangered medicinal wildlife”.

Administrative regulations formulated and adopted accordingly corresponding to the above-listed laws include, but are not limited to, the *Regulations on Protection of Wild Medicinal Resources* (30 October 1987), *Regulations of the People's Republic of China for Protection of Wild Plants* (30 September 1996), *Ordinance of the People's Republic of China on Wildlife Conservation* (November 1988, amended August 2004), *Regulations of the People's Republic of China on Traditional Chinese Medicines* (7 April 2003), and *Rules for Implementation of the Law of the People's Republic of China on Drug Management* (4 August 2002). Regulatory documents have also been issued by other sectoral Ministries and local governments in mutual support of the national laws and regulations.

### **A.3 Availability of the refined standards and best practices for medicinal resources protection and management**

Apart from the legal and policy framework, China has adopted codes, standards and practice to guide day-to-day activities of the TCM sector, including the *Pharmacopoeia of the People's Republic of China*, *Good Practice for Quality Control in TCM Material Production* (Trial Edition), *Green Industrial Standards for Foreign Trade of Medicinal Herbs and Products*, *Good Practice for Quality Control in Pharmaceutical Production* (2010 Revision), *Good Supply Practice for Pharmaceutical Products*, *National List of Key Protected Wild Medicinal Species*, *National List of Key Protected Wild Flora (I)*, *Protection List of New Flora Species of the People's Republic of China (I, II, III, IV & V)*, *Catalogue of Import and Export Wild Fauna and Flora Commodities*, *Catalogue of Main Forest Trees of the People's Republic of China (I)*, *Catalogue of Substances Taken as Food and TCM Materials by Tradition (Draft for Comments)*, and *Summary List of New Food Ingredients and Common Foods*.

### **A.4 Improved wild medicinal resources conservation and the sustainable use of TCM resources**

In recent years, conservation of wild medicinal resources in China has advanced thanks to strengthened legislation and law enforcement actions, as well as the launch of industrial policies of cross-support, and increased public awareness of resources conservation. On the one hand, with boosted scientific innovation and companies' input, scaling-up of the ex-situ production of wild species and industrialization, the cultivation area and production base rate of medicinal herbs have increased constantly. On the other hand, the incidence of resource-related crimes has dropped as a result of the improved legal and regulatory system, more efficient co-ordination among government agencies, and more appropriate control and facilitation measures.

## **B. Weaknesses of China's existing law, regulation, standard and best practices**

### **B.1 Legislation needs to be strengthened and its implementation system to be completed**

Despite the many positive developments with China's legal, regulatory and administrative framework, there is a significant gap between what the current framework has achieved in protecting and managing the wild medicinal resources and what it could be expected to achieve if the regulations were fully enforced. In general, domestic laws and regulations in China are formulated by government agencies in their own management

respective, resulting in them tending to be relatively single-sided in their legislative philosophy. The laws and regulations have deficiencies such as the weak description of regulatory measures, over-generality in articles and clauses which could be interpreted in different ways, prevalence of the problem that only sets out principles, but with limited information on implementation and responsibilities, absence of a definition for ethical standard, resource assessment, public participation and post-event accountability and sanctions, lack of the recognition of the importance of sustainable use, lack of clarity and specification of content and necessary linkages between laws.

Taking the *Regulations on Protection and Management of Wild Medicinal Resources* as an example, this regulation has been in effect for nearly 30 years, since 1987. The regulation is simple and straightforward, but the detailed rules for its implementation have not been determined until today. The real effect of this regulation in practice is hence limited, with a number of issues still outstanding that need to be addressed. The structure and function of the national administrative department needs to be adjusted dramatically, to ensure the execution of standards of incentives and penalties. Phrasing such as “it should be done according to the proved plan and managed by the Chinese medicine company uniformly” in the regulation needs to be updated and made more specific. In addition, since the promulgation of this law, China has become a Party to both the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention on Biological Diversity (CBD), since 1981 and 1993 respectively. Appropriate adjustments to the wording of the regulation needs to be made to reflect commitments made under these significant framework international agreements.

## **B.2 Need for the clarification of enforcement agencies’ responsibilities**

Currently, multiple departments are involved in the protection and management of wild medicinal resources in China. Among these, the forestry department of the State Forestry Administration is responsible for supervision and management of wild medicinal plant resources in the forest; the agricultural department is in charge of other wild plant resources beyond the forestry department’s control; the marine department is mainly responsible for monitoring and managing wild medicinal resources in marine nature reserves. The Ministry of Environmental Protection co-ordinates assignments between different government agencies, and carries out specific work, including co-ordination and monitoring the work of conserving wild plants all over the country and managing national nature reserves comprehensively. Issues around the management of TCM plant ingredients are relevant to a large number of departments, including the China Food and Drug Administration, the State Administrative Bureau of TCM, National Development and Reform Commission, Ministry of Health, Ministry of Agriculture, forestry department, Ministry of Industry, industrial and commercial bureau, and supervision bureau.

There are challenges with segmented legislation that is not consistent enough, overlap of legislative coverage by laws that are issued by different management units, narrow coverage by individual laws and regulations which do not give sufficient consideration to complicity, confusion in the scope of law application, enforcement bodies and an unclear definition of responsibility. This often results in a lack of communication and exchange between ministries and it is difficult to get a co-ordinated communication mechanism in this area. Overlap of administrative powers and lack of cross-departmental co-ordination are the main reasons for segmented management and are an obstacle in the effective implementation of laws and regulations in conservation of wild fauna and flora.



For example, Rule 16 of the *Regulations on Protection and Management of Wild Medicinal Resources* states that the qualification and standard of wild medicinal material should be set by the state department of the pharmaceutical administration and relevant departments in the State Council. Rule 20 states that anyone not in compliance with rules 13, 14 or 15 should be penalized by the industrial and commercial administrative department or other relevant departments by confiscating their illegal income and wild medicinal material, and fining them. Unfortunately, the rules are not specific on which “State department of pharmaceutical administration” and “relevant department” it refers to. This problem leads to the lack of clarity among the responsibilities of enforcement bodies. Therefore, it is necessary to clarify the goals and functions of different departments for better conservation of resources and the protection of wild medicinal resources.

### **B.3 Standards and best practices need to be refined**

China has relatively comprehensive standards and practices for wild medicinal resources conservation and management. Some provisions, however, are unclear and overly general. Most standards and practices are not specific, only outlining main principles, and are outdated. Process-oriented and people-oriented content in such standards is scarce, which has led to inefficiency in application due to the confusions in standards and procedures. *Regulations on Protection and Management of Wild Medicinal Resources* has gaps, compared to industrial statutes and other laws or regulations in setting classifications of endangered animals and designing lists for conservation. For example, it regards ginseng *Panax ginseng* as a second class protected medicine, while the species is not included in the *National List of Key Protected Wild Flora* (issued on 4 August, 1999). The list is also limited in scope. Modifying the list in line with scientific best practice should be done to benefit the conservation of resources and enforcement.

It would be beneficial as well to include references to the international best practices in China’s standards and best practices. For example, the FairWild Standard covers an important gap in linking high-level statements to design of sustainable resource management at the local level, and may be a particularly important reference.

### **B.4 Enforcement need to be enhanced**

Currently, illegal actions related to the harvesting and trade of wild herb resources are not infrequent. Such actions may include collection of restricted or forbidden species, gathering in protected areas, using unqualified tools to collect, having no collection permits and using restricted or forbidden species for trade. The *Regulations on Protection and Management of Wild Medicinal Resources* includes several clauses stating that a few departments should “co-operate” in administrative processes to grant permission or impose penalties. This clause is difficult to enforce, sometimes leading to a situation in which everyone has the responsibility but no one takes actions to realize the responsibility. Therefore, further improvement in national laws, standards and practice, as well as implementing a surveillance system, clearer definition of law enforcement body, and constant increase in technological innovation capability and capital investment will lead to higher efficiency in wild herb protection and management and with more visible effects.

## **Analysis of gaps between current laws, regulations, industry policies standards/practice and their implementation**

### **A. Undefined enforcement body cause enforcement failure**

The protection and use of medicinal plant resources involves a wide array of regulatory departments and statutes. The overlap and/or gap between laws and regulations, and the engagement of multiple departments in one single case has often caused confusion and lack of clarity as to which organization plays the leading role and

what responsibilities each of the departments concerned have been tasked with. It is hard to identify the lead responsibility if all listed agencies have similar nominal responsibility. Failure of enforcement happens especially when there is no performance evaluations/assessments clause for poor enforcement performance.

#### **B. Lack of specialized expertise of task force induces inefficient enforcement**

Law enforcement for the protection of wild medicinal plants often requires the professional verification of plant identification and quality. The testing of TCM materials is a highly specialized and technical task and can be handled only by trained professionals. That has posed a huge challenge to the lack of specialist expertise which may find evidence collection and verification very difficult in enforcement and at custom inspections, which in turn may undermine the efficiency and effectiveness of enforcement.

#### **C. Unclear resource ownership may be an obstacle in the protection of rights**

China's forest tenure reform has gradually shed light on forest management with a focus on timber resources, but not the ownership of non-timber forest products. Forest harvesters are still following traditional medicinal herb collection practices and may have little awareness of resource conservation and protection of ownership and access rights to the resources. Wide education and awareness raising is necessary, leading to the clarification of the rights to ownership and access to wild medicinal plants.

#### **D. Poor statutes operability and absence of functioning procedure**

The current laws and regulations are mostly principles that are overly general. The enforcement procedures are unclear and the punitive range too broad. The absence of viable procedures and excessive flexibility with punitive measures have led to lower efficiency and efficacy of enforcement.

#### **E. Lack of incentives and low feasibility of best practices cause low engagement of businesses**

Lack of penalties and other compliance measures to penalize the violation of laws is fairly common. The *Regulations on Protection and Management of Wild Medicinal Resources* state that those gathering without permits or breaking the rules of gathering and those selling or buying important national protected wild resources, should be fined 10 times the minimum income. Besides, measures for Collection and Management of Licorice *Glycyrrhiza glabra* and *Ephedra sinica* only mention briefly that unregulated gathering of *Glycyrrhiza glabra* and *Ephedra sinica* is bad for the ecological environment of grassland. The fine for unpermitted collection of licorice and ephedra is only 1-3 times the minimum income and no more than CNY30 thousand. This problem leads to a vicious circle of damage, where the low cost of illegal action leads to its persistent repetition. Application of weak enforcement actions, such as fining, to collection crimes will only trigger more crimes. Criminals are not deterred by a small fine, but rather are eager to recover their loss through illegal income from more illegal collection.

As formulated, the current statutes also provide limited incentives to harvesters and traders in compliance and adoption of new and improved management practices. Businesses and individuals have to invest significantly to obey regulations, which reduces the initiative for compliance. On the contrary, people involved with wild plant collection tend not to take the initiative in conservation liability. Crimes tend to keep repeating with low penalties, and people with a conscience can only learn to adapt to the situation. This is not supportive for conserving resources and the effectiveness and validity of law enforcement.

## **F. Unified implementation of industrial policies**

A great number of policies and programmes have been issued at central and provincial levels for protection and use of medicinal plants, the implementation of which has involved many departments, each with their own perspective and areas of concern. Therefore, the overall administrative support is weakened due to the different focus by stakeholder departments in medicinal resource conservation.

### **Towards better environmental governance: EGP MAPs project experience**

The EGP MAPs project aimed to bring together the perspective of different stakeholders in developing recommendations for future policy developments in China, both at the provincial and national level. Key outcomes in this result area include:

- Training sessions and targeted discussions carried out with government agencies, aiming at raising government awareness and capacity for the support of sustainable management of TCM resources at levels from central to provincial to local.
- A review of existing laws and regulations governing TCM resources carried out and the output reviewed through a process engaging multiple stakeholders, gaining input and a broad endorsement of the recommendations contained within this report.
- The project supported the formulation of policies encouraging sustainable TCM business practices. In particular, a policy proposal was made through the China Medical and Pharmaceutical Material Association (CMPMA) for adopting sustainable voluntary standards guiding sustainable wild-collection and environmentally-friendly cultivation of TCM raw materials to the National People's Congress and to the Chinese People's Political Consultative Conference (CPPCC) in March 2015 (See text of proposal in Annex 4). CPPCC is the highest legislative and advisory government institution of China. The proposal was delivered as an aspiration from the whole TCM industry. While the official feedback from government on this proposal will only be received after the project ends, it provided an opportunity to generate discussion of sustainable development of TCM industry at the legislative level.

In addition to the policy recommendations for China, the project made efforts to replicate further and share experiences at the international level. The project lessons learnt were presented at the 12<sup>th</sup> Meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD CoP12, held in October 2014 in Pyeongchang, Republic of Korea). This included targeted interventions during the discussion of the Global Strategy for Plant Conservation (GSPC) and biodiversity and health; as well as presentations to CBD Parties, government agencies and other representatives at side-events and the Business and Biodiversity congress (held in October 2014 in Pyeongchang, Republic of Korea).

**Timeline and summary of the activities** in support of the development of an enabling environment for sustainable supply chains and sourcing practices among the TCM industry (Result 4 of EGP MAPs):

In November 2013, a verification trip to Wecome in Lishui, Zhejiang province, a target company in Zhejiang province was conducted. Awareness raising meetings were held with government officials in Jinyun and Jingning (Yunhe counties of Lishui). Project information and the concept of sustainable use of wild medicinal plants were shared and well-received.

In November 2013 a launch meeting and government awareness-raising workshop was held in Hunan. A project target TCM manufacturer Hunan Solita invited officials from different governmental agencies including Deputy

County Governor, Lianqiao Township Governor, County Health Care Bureau, County Environmental Protection Bureau, County Agricultural Bureau, County Forestry Bureau, County Medicine Inspection Bureau, County Foreign Affairs Office, and County Science & Technology Bureau. Over 30 participants, including the members of Shaodong Association of *Polygonati officinalis* cultivation and department directors of Solita, its suppliers' representatives, and Wecome attended the event.

In July 2014, the Longquan Corporative and Wecome Trade Alliance establishment meeting was held. Local government officials from the Agriculture and Forest department attended the event. Sustainable development of TCM industry in Longquan County was discussed with officials and associations.

In August 2014, an organic cultivation exchange trip was conducted with officials from the State Administration of Traditional Medicine (SATCM), target companies and project partners. Organic cultivation of TCM practices and experiences in Goji berry cultivation base in Ge'ermu and Delingha cities were shared.

In October 2014, Project partners, together with US herbal tea company representatives conducted a study and experience exchange visit to Pingwu county, Sichuan province to exchange with Pingwu Shuijing Farmers Association. Experience of creating a self-governed voluntary farmers' organization and sustainable development of the local economy were discussed. The local government in Sichuan province is planning to develop the TCM market.

In October 2014, the project target companies attended the 11<sup>th</sup> World Conference of Chinese Medicine in Saint Petersburg, Russia. A dedicated workshop was organized for participants on the issues of sustainability in the TCM sector, and issues of creating an enabling regulatory environment discussed.

In October 2014, the EGP MAPs project was presented at the 12<sup>th</sup> meeting of the Conference of the Parties to the Convention on Biological Diversity, Pyeongchang, Republic of Korea. In particular, a formal intervention was made during the agenda item on biodiversity and human health, focussing on the EGP MAPs experiences with the TCM industry and calling upon CBD Parties to increase support to the implementation of the best practice standards (FairWild Standard) in support of better wild-harvesting practices (See Annex 5 for the text of the intervention on behalf of TRAFFIC).

In January 2015, a TCM industry and government exchange workshop was held in Beijing. Government officials from SATCM, Forestry, and Ministry of Commerce attended. TCM companies from the Trade Union of Genuine Regional Material Medica (TUGRMM) and China Medicinal and Pharmaceutical Material Association exchanged ideas with government officials and briefed on the latest industry information. The FairWild Standard and sustainable development was presented to government officials.

In March 2015, a policy proposal was developed and submitted by EGP MAP partners through CMPMA to the National People's Congress and to the Chinese People's Political Consultative Conference (CPPCC). While the official feedback from government on this proposal will only be received after the project end, it provided an opportunity to generate discussion of sustainable development of the TCM industry at the legislative level.

On 14 April 2015, the State council issued: China National Plan TCM plants protection and development 2015-2020. The plan, compiled by a total of 12 government agencies, consists of seven major goals to be met between 2015 to 2020. These goals are aiming at better protection of wild TCM plants, a higher quantity and quality of farmed plants, and a mature pricing mechanism. According to supervisory officials, the plan comes at a time when over-exploitation is threatening wild TCM plants and the worsening quality of farmed TCM resources damaging the real effectiveness of TCM. TRAFFIC was interviewed by China Radio International and provided

comments on the plan on behalf of the EGP MAPs partners, highlighting the EGP, TCM industry leadership work in China and the importance of implementation of sustainability standards. The interview was broadcast as part of the ‘People in the know’ commentary to the plan, available in China and internationally (broadcast available at: <http://english.cri.cn/7146/2015/05/14/3621s878660.htm>).

In April 2015, project partners carried out the Second TCM Corporate Social Responsibility and Sustainability Forum in Hangzhou, Zhejiang province (after the first Forum meeting in February 2014). A set of case studies, focussing on the implementation of best practices through policies and FairWild certification and improved sustainable resources use practices was launched and distributed widely. The initial findings of the policy consultancy report and the policy recommendations (referenced below) were presented at the Forum, and received overall support and comments from the participants, which were taken into account in finalizing the recommendations. The case studies relevant to the development of policies and the implementation of best practices include the following (see [www.traffic.org/egp-maps](http://www.traffic.org/egp-maps) for the text of case studies, available in Chinese and English):

- European policies on wild plant conservation and sustainable use
- National Strategy on Non-Wood Forest Product Sector of Republic of Kosovo
- Sustainable management of wild plant resources through the application of FairWild Standard principles in Bosnia and Herzegovina
- Sustainable management of *Pelargonium sidoides* in South Africa and Lesotho

In July 2015, following preliminary meetings held in October 2014, project partners conducted meetings with certification bodies to further opportunities for FairWild Standard, the best practice framework for wild-harvesting and equitable trade application in China. Advances were made with identifying the roadmap and possibilities for FairWild availability in China, including through the strengthened partnership with the certification body China Quality Mark (CQM). This collaboration will continue beyond the project end, including with ISEAL Alliance (an international organization for sustainability standard research and promotion) in China, exploring the opportunities for joint promotion of the voluntary international standards in the country.

## V. INTERNATIONAL EXPERIENCE

The difficulties encountered in ensuring the sustainability of use, trade and consumption of wild plant ingredients are by no means unique to China. Contemporary European use and trade in medicinal and aromatic plants (MAPs) is extensive. Over 2,000 wild plant species are estimated to be traded commercially in Europe, of which 60-70% are native to central Europe, and over 90% of these species are still collected from the wild. There is a continuing challenge to ensure that wild-harvesting and trade is sustainable and equitable. Information on the current situation, and first-hand accounts of experience with conservation and trade initiatives in Europe have been reviewed and documented in line with EGP’s emphasis on exchange between China and the European Union (EU).

There are extensive conservation efforts focused on plants and their habitats at all scales from the international to the national, and increasingly, market tools are being developed to promote the sustainable use of medicinal plants. The overexploitation of wild resources has been identified as the primary threat to medicinal plants in Europe in a recently published regional Red List (Allen *et al* 2015).

## **Protection of habitats and species: international framework**

As previously outlined, the international framework provided by multilateral environmental agreements such as the CBD and CITES, and by the guidelines and work programmes established by international organizations such as the WHO, provide the international context for the conservation, use and sharing of benefits from biodiversity, including the trade in TCM plant ingredients. The EU, party to both CBD and CITES, is implementing legislation in place both at the EC level and at the level of the individual member countries of the EU. For example, the CBD's Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is implemented in the EU through regulation 511/2014. The CBD's Global Strategy on Plant Conservation is implemented through a corresponding European Strategy on Plant Conservation.

On the international level, the Convention on Biological Diversity (CBD) promotes biodiversity conservation, sustainable use of its components and the equitable sharing of the benefits arising from the use of biodiversity. In relation to plants, the Global Strategy for Plant Conservation (GSPC) was adopted by the CBD in 2002. The updated GSPC sets targets for the period 2011-2020 which are of direct relevance to medicinal plants.

China has been a Party to the CBD since 1993 and has developed the national response to GSCP. Of particular relevance to the sustainable use and trade of plant TCM resources is the strengthening of the China Strategy for Plant Conservation objectives that related to the sustainable use of wild-harvested plants.

The CBD Strategic Plan agreed in Nagoya, Japan in 2010 established a further 20 target actions (the Aichi Biodiversity Targets). The CBD, in partnership with the World Health Organization (WHO) is also developing an area of work relevant to medicinal plant conservation, around biodiversity and human health.

The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, another relevant policy document, is implemented in the EU through regulation 511/2014.

Another multi-lateral environmental agreement that provides a framework for trade in medicinal plants is the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). A number of plants traded for medicinal and aromatic purposes are subject to regulatory control under Appendix II of CITES, which aims to ensure trade is both legal and sustainable – primarily through the effective use of non-detriment findings (NDFs). Useful tools developed to support the implementation of CITES include the voluntary guidance on non-detriment findings for perennial plants (*Leaman D.J. & Oldfield T.E.E. 2014 CITES Non-detriment findings guidance for perennial plants: A nine-step process to support CITES Scientific Authorities making science-based non-detriment findings for species listed in CITES Appendix II. Version 1.0*). China has been a Party to CITES since 1981. Following a rigorous NDF process, e.g. referencing the aforementioned NDF guidance, is recommended for the relevant Appendix II listed species traded from China. In addition to this, it may be of particular relevance to review livelihood and conservation impacts of existing policy approaches (i.e. shift to cultivation) to managing species threatened by trade, in particular those listed in the CITES Appendices.

WHO in its Traditional Medicine Strategy, prioritizes the finalization of the update of the WHO/IUCN/WWF/TRAFFIC Guidelines on the Conservation of Medicinal Plants, which will provide an important guidance to WHO members on the conservation and sustainable use of medicinal plants.

## **Protection of habitats and species within Europe**

European countries and EU Member States are signatories to a number of regional conventions and Directives targeted at conserving species and their habitats, including vascular plants. These include the EU Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention), EU Habitats Directive, and EU Wildlife Trade Regulation.

The EU Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) is a binding international legal instrument that aims to conserve wild flora and fauna and their natural habitats and to promote European co-operation towards that objective. Also at the European level, countries endorsed the pan-European 2020 Strategy for Biodiversity, which refocuses efforts to prevent further loss of biodiversity in the region and provides a mechanism for supporting the implementation of the global Strategic Plan for Biodiversity.

EU nature conservation policy is based on two main pieces of legislation – the 1979 Birds and the 1992 EU Habitats Directives (Council Directive 92/43/EEC). The main aim of these Directives is to ensure the favourable conservation status of habitats and species found in the EU. One of the main tools to enhance and maintain this status is the Natura 2000 network of protected areas, which currently contains over 27,000 terrestrial and marine sites, covering almost a fifth of the EU land area as well as substantial parts of the surrounding seas. In addition the EU has committed to a long-term (2050) vision and mid-term headline target for biodiversity, to halt the loss of biodiversity and the degradation of ecosystem services by 2020 and restore them in so far as possible. The establishment of these policy instruments indicates the high political commitment to biodiversity conservation and the need to monitor the status of biodiversity so as to assess progress towards meeting conservation objectives and targets. There are a number of geographically-specific conventions (e.g. The Alpine Convention or the Framework Convention on the Protection and Sustainable Development of the Carpathians) in the European region. In order to co-ordinate the implementation of the GSPC at the regional level, the European Strategy for Plant Conservation (ESPC) was adopted. First developed in 2001, the Strategy was renewed and targets aligned to GSPC were set for 2008-2014.

Plant habitat conservation efforts have in part been focused through the identification of Important Plant Areas (IPAs). IPAs are internationally significant sites for wild plants and threatened habitats, and contain over 700 of the most threatened species in Europe and millions of hectares of the most threatened habitats. At least 1,770 IPAs have been identified in 16 European countries.

Such regional biodiversity conservation strategies may be a useful direction for the implementation of the transboundary measures, for example linked to the international trade in wild plant species, and the feasibility of using the European experience may be considered, e.g. for the Asia-Pacific or East Asian regions.

### **European national legislation**

At the national level, countries have developed legislation to focus conservation efforts on habitats and threatened plants. Examples of relevant legislation include the identification of protected or endangered flora, national Red Books or Red Lists. By 2007, almost all EU countries had initiated national Red Lists. Countries in the region have also developed National Biodiversity Strategies and Action Plans (NBSAPs), accompanied by the national reports against the implementation. In some cases, specific national response to the GSPC (e.g. UK, France, Austria) were developed. A number of protected areas have been established at the sub-national, national, and transboundary levels, contributing to plant habitat and population conservation efforts.

EU legislation and policy affecting MAPs conservation, use and trade is not restricted to that with its basis in nature protection. As is found to be the case in China, laws and regulations arising from other policy drivers (e.g. consumer protection) may ultimately have a big impact on the production and trade of plant resources. Constant efforts to align legislation, reduce inconsistencies and overlap and streamline implementation are required. Biodiversity conservation concerns are now increasingly being incorporated into regulations developed from a starting point of e.g. consumer protection, and also impact on sourcing from regions outside of the EU.

Strategies specific to sustainable wild-collection of plants have also been developed in several European countries (e.g., some Balkan states). One example of such regulation is from the Republika Srpska (Bosnia and Herzegovina) 2010 Rulebook of Conditions for Utilization and the Methods of Collection of Other Forest Products and its 2014 amendment, based on the Law of Forests. In common with other areas of biodiversity conservation, the level of co-operation between sectorial Ministries at the national or sub-national level may be limited, which potentially prevents the development of better medicinal plant conservation strategies. However, in some cases where MAPs have been identified as important resources, co-ordinated efforts are underway, under the leadership of relevant government agencies and with development aid funding (see case study on Kosovo, available for download at: <http://www.traffic.org/storage/Case-study-9-EGP-MAPs-National-NWFPS-strategy-Kosovo.pdf>).

The EU policy process is open to the input of civil society and private sector actors (in addition to that of its Member States), and is relatively transparent. For example, during the implementation process of the EGP MAPs project, a policy consultation process has been underway on the EU Organic regulations, which has involved the active communication of proposed changes by EU officials through venues such as trade fair symposia, as well as more formal mechanisms for comment and response.

### **Experiences promoting sustainable use and trade of MAPs in Europe: The FairWild Standard**

As outlined above, Europe is an important region for the production, trade and consumption of MAPs. It also has a high level of consumer sophistication, demanding high levels of product safety, quality, and assurance on environmental and social issues. A lively civil society sector manifests through loose regional networks of NGOs and other actors involved with MAPs conservation and trade, and industry associations such as EUROPAM also take an active role in shaping and defining best practice for the sector.

The FairWild Standard, best practice guidelines for sustainable use and trade, while being an international initiative has a strong history in Europe, with the input from civil society groups, government development aid agencies and nature protection agencies, and industry groups in countries such as Germany, Switzerland, and UK. Today, a wide range of companies are engaging in the FairWild certification scheme, with participation and involvement from all parts of the trade chain including producer (Poland, Spain, Bulgaria, Hungary, Bosnia-Herzegovina), trader and manufacturers. A number of experiences were documented through cases studies under the EGP MAPs project – including challenges, as well as clear explanations of the benefits to their participation.

Challenges in Europe for the wild plants trade include conservation and nature protection (as evidenced by the recent Regional Red List assessment report of European medicinal plants), but social and economic aspects are often also key. As rural-urban migration increases and average incomes rise – a transition still underway in parts of the EU and neighbouring countries – wild collection becomes less appealing as a livelihood. Here, “FairWild” principles of respecting traditions and investing in marginalized communities (such as the elderly and ethnic



minority groups for whom wild collection remains important) become particularly important. Equitable trade projects in line with FairWild can help to maintain good relationships, and ultimately the viability of production of medicinal ingredients needed by the herbal products industry. For example, in Central and South-eastern Europe, the number of traditional wild-collectors of medicinal plants is declining due to continuing urbanization (similar to the situation in many parts of China), putting at risk the survival of the tradition of wild-collection of medicinal plants. This issue is being addressed for example through the Traditional and Wild ([www.traditionalandwild.eu](http://www.traditionalandwild.eu)) project in Hungary, Czech Republic, Slovenia and Poland, focusing on the revitalization of the tradition of wild-collection. The project developed training materials and strategies focussing on the use of the FairWild Standard, as well as an online toolkit ([www.whygowild.com](http://www.whygowild.com)).

### **Lessons and conclusions**

Conclusions and recommendations for the development of policy and sustainable business practices for conservation and sustainable use of medicinal plants in Europe, relevant to the adaptation to China's policy environment, include:

- Effective government regulations and policies create an enabling environment for the conservation and sustainable use of wild medicinal plants in Europe. Tools such as the FairWild Standard can be applied to improve existing management practices and provide a framework for such policies.
- Integrate medicinal plant conservation measures into National Biodiversity Strategy and Action Plans (NBSAPs), and where relevant develop specific plant conservation strategies at the national or sub-national level.
- Cross-sectoral co-operation between ministries is important for the development and implementation of effective medicinal plant conservation and sustainable use strategies. Such co-operation should extend across all sectors, including environmental protection, agriculture, forestry, economic and rural development, and health.
- Encourage the uptake of the FairWild Standard and certification scheme for sustainable wild-harvesting and equitable trade to prevent population decline of wild-collected species.
- Engagement of multiple stakeholder groups is of critical importance to the successful policy implementation.

## VI. POLICY IMPLICATIONS AND RECOMMENDATIONS

The aim of the recommendations is to provide guidance, based on the multi-stakeholder input obtained during the implementation of the project, to relevant government agencies and other stakeholders with a view of improving the existing policies and laws governing wild medicinal plant resources, as well as their implementation.

The draft policy recommendations were presented at the 2<sup>nd</sup> TCM Corporate Social Responsibility and Sustainability Forum in April 2015, incorporating input received from the target project companies, government and research agencies, and participating NGOs. Based on their feedback the report was further developed and shared for a round of consultations with government agencies and companies in June-July 2015.

These recommendations provide the mix of those focussed on the revisions and fine tuning of the existing policies and regulations, those requiring the improvements of the effectiveness of existing policies, including standards and enforcement. In order to guide the implementation of the recommendations in practice, they were designed targeting four distinct stakeholder groups that influence conservation, management, use and trade of wild medicinal plant resources in China: (1) Legislative government agencies at all levels, and law enforcement agencies<sup>3</sup>, (2) specialized government agencies responsible for enabling and implementing policies<sup>4</sup>, (3) research institutions, (4) companies and relevant industry associations. See Figure 1 for an illustration of the interaction between these stakeholders. The recommendations concerning the rights and benefits for wild-harvesting communities and farmers as important stakeholders in the TCM sector, are included in the relevant policy recommendations.

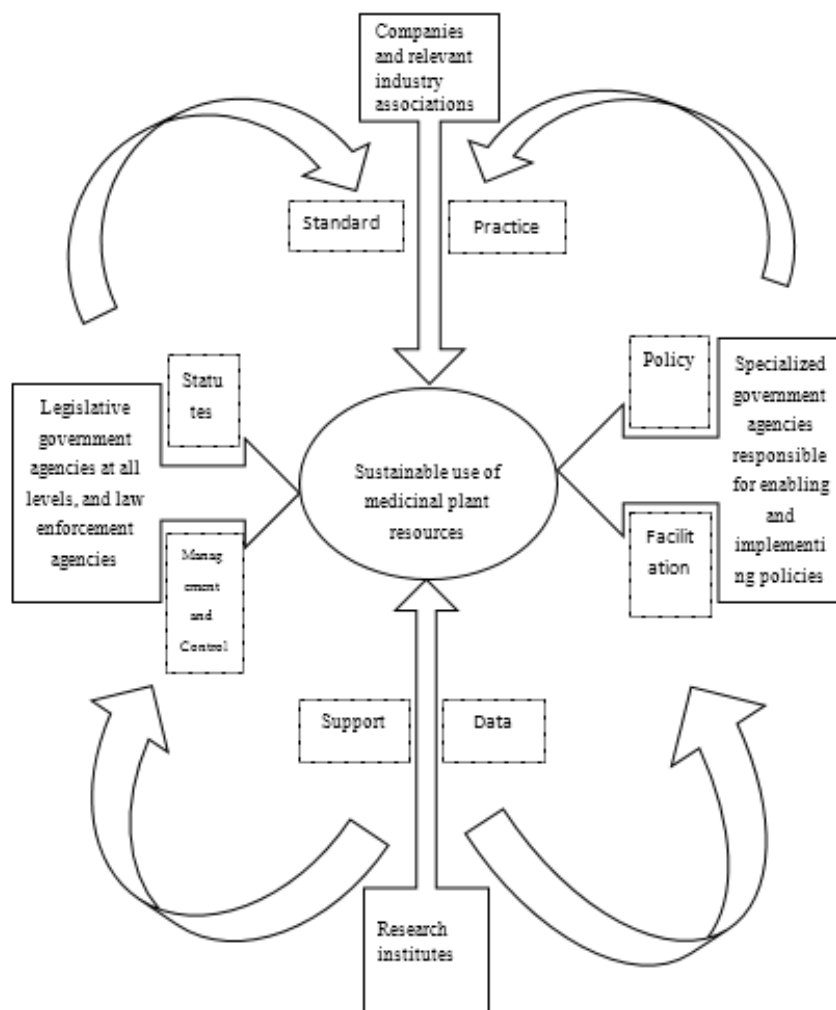


Figure 1. Interaction of key stakeholder relevant to TCM sector policies

In terms of policy obstacles to the EGP MAPs project implementation, the major impact was the ambiguity around the adoption of international standards in China. Although many international voluntary standard systems are already operating in China – and there are clear market advantages to China, as well as benefits in implementing international best practice in resource management and sustainability – there has been a “grey area” around the legal position of such operations, and process by which they may obtain any necessary government endorsements. Indications during the lifetime of the project have been of greater openness from China towards the adoption and operation of such standards (e.g. in the latest Five-year National plan). This bodes well for continued adoption of sustainable practices as well as market opportunities (as highlighted in the

<sup>3</sup>Referring to China People’s Congress – national legislative body, central and local government at all levels and enforcement agencies, such as forest police

<sup>4</sup> Referring to government agencies including SFA, SATCM, Ministry of Commerce, Ministry of Finance, and Tax Bureau

International Trade Centre 2015). The continuing dialogue around this topic is important beyond the project end, as well as proving channels for open communication of civil society actors with the respective government departments. The latter proved occasionally more difficult than expected during the project implementation, with government officials feeling unable to join some planned study trips or workshops (due to the need to avoid any perception of undue industry or civil society influence), thus requiring more of the policy engagement and consultation work to be done virtually, through writing or other comment processes.

The recommendations are appropriate for replication beyond China. Beyond the TCM sector, the recommendations may be found useful to other sectors which are working towards the wider recognition and enabling condition for the international voluntary standards.

Policy recommendations:

**I. Improvement of legislation and strengthening management and control of wild medicinal plant resources (directed to legislative government agencies at all levels, and enforcement agencies)**

- 1.1 Identify the resource value of medicinal plants, raise awareness of the need for resources protection, and establish the concept of sustainable utilization of resources at all levels.
- 1.2 Accelerate the revision of existing legislation concerning traditional Chinese medicine, including clarification of the legal status, protection, dynamic monitoring, and regular surveys of wild medicinal plant resources. The legislation should encourage conservation, sustainable use and cultivation of medicinal plants.
- 1.3 Revise the existing *Regulations on Protection and Management of Wild Medicinal Resources*, to inform the development of standards for endangered wild medicinal plant resources, necessary adjustments in species protection lists, expansion of protection scope, and clear administrative responsibilities. The Regulations should establish the principle of compensated use of resources, supplement the terms of Prohibited Actions, and define the legal principle and bottom line. The revision should inform the adjustments in the relevant provincial-, and local-level legislation.
- 1.4 Ensure involvement of stakeholders, including industry, industry associations, research institutes, enterprises, wild-collectors and communities, and civil organizations in the development of the legislation.
- 1.5 Clarify and improve the wild medicinal plant resources ownership regime to ensure the clear division of rights and responsibilities. Clarify and standardize the collection permits system and ensure non-discrimination for all resource users.
- 1.6 Strengthen law enforcement within the State Forest Administration for conservation and sustainable use of wild medicinal plant resources.
- 1.7 Build capacity of relevant agencies to ensure the effective implementation of legislation at all levels, including through targeted training programmes. Establish performance evaluation and accountability mechanisms for enforcing the legislation and tasks identified in respective conservation programmes for wild medicinal plants.
- 1.8 Support dialogue in the nexus of biodiversity conservation and health, including through promoting closer collaboration between sectoral ministries, including the Ministry of Environmental Protection, State Administration of Forestry, State Administration of Traditional Chinese Medicine, Ministry of Health,

Ministry of Commerce, Ministry of Industry and Information Technology and others, in particular as related to discussions on the sustainability of harvesting of wild plants.

- 1.9 Relevant to CITES implementation in China, review livelihood and conservation impacts of existing policy approaches (i.e. shift to cultivation) to managing species threatened by trade, in particular those listed in the CITES Appendices and those of high commercial importance. Support the use of rigorous Non-Detriment Findings guidance for medicinal plant species.
- 1.10 Relevant to CBD and its Global Strategy for Plant Conservation implementation, include the reference to the sustainability of wild collection in the China Strategy for Plant Conservation, and pilot the implementation of the sustainable wild collection and equitable trade approaches to the strategically selected medicinal and aromatic plant species. Include the implementation of the EGP MAPs project into the next China's National Report to CBD.

## **II. Development of policy measures to encourage and promote sustainable use of medicinal plant resources (directed to specialized government agencies responsible for enabling policies)**

- 2.1 Set up a Special Government Support Fund for issues concerning the conservation and sustainable use of medicinal plant resources
- 2.2 Conduct a comprehensive economic valuation of China's wild medicinal plant resources, and based upon it, introduce a compensation system, such as payment for ecosystems services (PES) and the resource use compensation tax.
- 2.3 When developing and implementing favourable economic policies for TCM and MAPs industry companies, take into account companies' performance as related to the implementation of certification standards and schemes that meet international benchmarks such as the FairWild Standard, the experience of product registration, and the track-record of the approval of government-supported projects.
- 2.4 Encourage government agencies at all levels to formulate conservation and development programmes for TCM materials (including sustainable cultivation programmes) in response to "China National Plan for TCM plants protection and development 2015-2020".
- 2.5 Government agencies at all levels should encourage conservation of China's TCM wild plant resources. In particular, through the encouragement of companies to use wild TCM plant resources in their products and formulate steps to ensure sustainable use, and where necessary protection of these resources. Companies should further be encouraged to develop operational and management practices with reference to international standards on sustainable use of wild plants. Government funding and tax incentive schemes should favour companies that are certified against domestic or international standards for sustainable use of medicinal plant resources.
- 2.6 Financial and insurance institutions and agencies should evaluate TCM and MAPs companies' practices in the area of sustainable use of medicinal plant resources, when assessing the overall companies' performance and credit rating. This would further help enhance companies' vision of development and corporate social responsibility.

## **III. Scientific research in support of sustainable resource development (directed to research institutions)**

- 3.1 In line with the "China National Plan for TCM plants protection and development 2015-2020", carry out the 4<sup>th</sup> National Survey of China's Medicinal Resources, as a follow-up to the latest 1983 survey, develop

priority species management plans, and establish a dynamic monitoring network feeding information into the annual updates on the status of wild medicinal plant resources.

- 3.2 Carry out a nationwide assessment of the conservation status of medicinal plants using widely recognized conservation tools, such as the IUCN Red List criteria.
- 3.3 Develop technologies for conservation and sustainable use of medicinal plants, including detailed resource inventories.
- 3.4 Compile a national programme for protection and sustainable use of wild medicinal plant resources.
- 3.5 Create medicinal plant germplasm banks and undertake *in-situ* and *ex-situ* conservation activities.
- 3.6 Establish pilot zones for conservation and sustainable use of wild medicinal plants. These pilots should be established with the participation of all relevant stakeholders and include in-situ conservation measures, studies of plant regeneration, and trial sustainable wild-harvesting with reference to international standards on sustainable wild-harvesting (e.g. FairWild Standard).

#### **IV. Introduce international standards and encourage companies to implement sustainable business practices (directed to companies and relevant industry association)**

- 4.1 Raise environmental consciousness and encourage the adoption of sustainable wild-harvesting practices by introducing international best practices (e.g. the FairWild Standard), raise awareness of such practices and promote their acceptance through publicity and training.
- 4.2 Select representative companies to pilot sustainable management practices certification that meet international benchmarks such as the FairWild Standard, evaluate the outcomes, and increase their use beyond pilot schemes. The project of “*Engaging the Private Sector in sustainable management of medicinal plants – the multiplier effect*” is a relevant case study for piloting FairWild Standard with companies.
- 4.3 Support companies to introduce risk analysis and resource assessment for the ingredients in their products, establish management plans for these resources and introduce a traceability tracking system. Encourage further periodical review of sustainable sourcing and supply chain management practices and introduce these issues into companies’ CSR reporting and longer-term development strategies.
- 4.4 Promote the notion of enhanced product and brand value through sustainable sourcing and management practices and share relevant case studies.
- 4.5 Promote sustainable consumption of TCM products and the importance of sustainable and legal sourcing of TCM ingredients among domestic and international consumers, to increase market demand for sustainable sourcing and production.
- 4.6 Encourage the development of long-term relationships with wild-harvesting communities based on the principles of mutual respect and equitable trade and with consumers of products containing wild-harvested medicinal plants. Such holistic value chain relationships will ensure transparent communications and help promote a positive image for the TCM sector.

The above set of recommendations form a comprehensive programme of work that, if adopted, would help to secure a sustainable future for TCM plant ingredients production and trade in China.

These recommendations are much in line with the “China National Plan for TCM plants protection and development 2015-2020” published in April 2015. However, provisions and detail in the National Plan on

sustainable use and the possibility of private sector to play a positive role in responsible sourcing from the wild, as well as the potential of market-based instruments such as FairWild, could be strengthened, and it is hoped that these recommendations may both support initial implementation and inform further updates of the National Plan.

Finally, the EGP MAPs project has helped to demonstrate the value of co-operation between civil society groups, private sector and government agencies in the introduction of new sustainability approaches in China, including international experience. It is hoped that the action plan for sustainable production in China's TCM sector will be further implemented by stakeholders, e.g. through additional projects.

## VII. REFERENCE LIST

Allen, D., Bilz, M., Leaman, D.J., Miller, R.M., Timoshyna, A. and Window, J. 2014. European Red List of Medicinal Plants. Luxembourg: Publications Office of the European Union.

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Runhuai Zhao Wang and Jiyong Cao Hailu, 2015. Policy, Laws and Regulations for Collection, Management, and Sustainable Use of Medicinal Plant Resources, unpublished EGP MAPs project report

# VIII. ANNEX 1. Policy review consultancy Terms of Reference

专家顾问合同标题:

地方、省级和国内外药用植物（特别是野生资源）采集、管理及利用政策研究——旨在为可持续中药产品在中国的推广提供政策建议

中国中医药企业参与药用植物资源可持续管理项目 EGP-MAPs（中欧环境治理项目）

## Background 背景

WECOME Pharmaceutical Ltd in collaboration with its partners TRAFFIC International, World Federation of Chinese Medicine Societies (WFCMS), and WWF China Programme Office have developed the project entitled: “Engaging the Private Sector in sustainable management of medicinal plants—the multiplier effect”. The overall objective of this project is to establish green industry supply chains among Traditional Chinese Medicine (TCM) stakeholders, linking private sector manufacturers and traders in Hunan and Zhejiang Provinces to producers in order to achieve sustainable management of medicinal plants, livelihood benefits and contribute to improved environmental governance. The project is using the FairWild Standard for sustainable harvest and fair trade in wild collected plant ingredients as the sustainability framework for the project.

国际野生生物贸易研究组织（TRAFFIC），浙江维康药业有限公司，世界中医药学会联合会（WFCMS）和世界自然基金会（WWF）中国项目办公室联合参与执行“中国中医药企业参与药用植物资源可持续管理”的项目。该项目的总体目标是在传统中医药（TCM）行业的利益相关者之间建立绿色供应链，将湖南、浙江两省之间的制造商、贸易商与生产商联合起来，实现药用植物的可持续管理，改善农民生计，提高环境治理水平。项目采用《FairWild 标准》作为项目野生植物可持续利用的基本框架，衡量野生采集植物成分是否符合可持续采集和公平贸易标准。

The potential for the TCM products sector to move towards sustainable production and consumption is strongly influenced by the policy and regulatory environment in which the private sector operates. This environment can hinder or reinforce the uptake of sustainability measures, through the creation of barriers and incentives for the private sector to take action. In addition to the formal policy and regulatory environment and government programmes to support development of the sector, other stakeholders, including trade associations and intergovernmental organizations, have the potential to provide support to enterprises in TCM production sector.

传统中医药产品行业实现可持续生产和消费的潜力严重受其所在行业政策和法规环境的影响。政策环境可能作为障碍或者激励因素，影响和决定私营企业是否实施相关可持续的生产经营活动。除了正式的国家政策和法规环境外，包括行业协会和政府间组织在内的其他利益相关方都可能为传统中医药生产行业的企业提供相应的建议支持。

Aiming to utilize such opportunities and create enabling incentives and remove barriers for TCM manufacturers, traders and producers to take up sustainable production systems, the project will provide a forum to improve government awareness and capacity for sustainable management of wild medicinal plant resources, built through partnership with TCM private sector and other stakeholders (specific project objective 4).

为使传统中医药制造商、贸易商和生产商能够抓住机会、创造动力、铲除障碍采用可持续生产体系，本项目将通过可持续论坛和政策研讨会等形式，建立传统中医药私营部门和其他利益相关方合作伙伴关系的沟通交流平台，提高政府对于野生药用植物资源可持续管理的意识和能力（EGP-MAPs 项目目标 4）。多方参与进一步优化改善现有传统中医药资源管理，从而助力中国创建可持续生产环境。

#### Scope 范围:

Consultant will liaise with the EGP MAPs project staff: TRAFFIC with expertise in MAPs trade knowledge and international plants sustainable use policies, WECOME representing the TCM industry and engaged in industry association, and WFCMS role as a think tank for government on TCM development and management in the development of recommendations. Development of the recommendations will be carried out through consultation with participants in this action, including manufactures, traders and producers, other interested TCM manufacturers and traders in Zhejiang and Hunan province, communities, relevant NGOs, and other stakeholders. Manufacturers and traders will also be consulted to make sure their needs are clearly captured in any proposed policy revision before delivery to the relevant government agencies.

顾问将联系 EGP MAP 项目员工：TRAFFIC 具备药用植物贸易知识和国际植物可持续利用政策专业知识，“维康”代表传统中医药行业及其相关的行业协会，WFCMS 在推进建议过程中作为中医药发展和管理的政府智囊团。推进建议的工作将通过咨询参与本项目的人员方式进行，包括浙江和湖南省的制造商、贸易商和生产商、其他感兴趣的传统中医药制造商和贸易商、社区、相关 NGO 和其他利益相关方。同时也会咨询制造商和贸易商以确保呈送相关政府机构的政策修改建议符合企业需求。

To present findings of the study and review the recommendations, a multi-stakeholder workshop will be facilitated by project partners (WFCMS, WECOME, TRAFFIC, WWF). Besides stakeholders from target provinces in China, participants will be invited from other areas (e.g. ECBP project sites, where WWF remains to be actively involved with producers) with relevant experiences, and experts on China MAP trade will be invited to this workshop to provide the perspective on sustainability of TCM production from wild collected plants imported to China from abroad. The final proposal for policy revisions will be delivered at the final workshop of the project.

项目合作伙伴（WFCMS、WECOME、TRAFFIC、WWF）将举办多利益相关方研讨会，介绍研究成果和评估相关建议。除中国目标省份的利益相关方以外，还会邀请来自其他地区（如 ECBP 项目所在地的积极参与 WWF 活动的生产商）具备相关经验的参会代表，以及中国中药植物贸易专家参加本次研讨会，就国外进口中国的野生采集植物原作为生产原料的可持续性发表见解。项目研讨会结束后，将会提交最终的政策修改建议。

The consultancy directly maps to the project logframe primarily under activities 4.3.1, 4.1.1 and 1.3.1.

该咨询工作是 EGP-MAPs 项目逻辑框架下的第 4.3.1、4.1.1 和 1.3.1 项活动内容。

#### Objective 目标:

The consultant will:

顾问将:

(1) carry out the review of existing policies and regulations that are relevant to the wild collection, cultivation, management plants, and TCM production regulation of the TCM sector at three levels: international, national (China) and provincial (Zhejiang and Hunan provinces) levels. The review will specifically focus on the aspects of policies relating to the mitigation of risks of detrimental impacts on plants or environment, and mechanisms of engaging private sector into the decision making. In the review, consultant will use the previous



experiences of implementing sustainable wild MAP management in different areas in China (ie in Sichuan, Shaanxi and Gansu Provinces, carried out under the ECBP project), and the review of applicable standards and policies (focusing on voluntary standards) completed in the frame of EGP MAPs project.

1. 政策、法律法规和标准的调研：对现有的野生植物，特别是药用植物的采集、培育和资源管理相关的政策和法律法规和行业标准进行搜集、总结和分析。范围包括国家级（中国）、省级（浙江和湖南）市级（浙江丽水地区）政策、法规和标准，以及与野生植物特别是药用植物相关的国际公约、政策和框架机制等（如植物保护战略和可持续利用、植物物种贸易相关政策）。

研究时应特别着眼于消除对植物或环境产生破坏性影响的政策法规，以及吸引私营企业参与政策决策的机制。

研究过程中，顾问将借鉴以往在中国各地实施可持续野生药用植物管理的经验（即在四川、陕西和甘肃省实施 ECBP 项目时推出的管理活动），以及在本项目框架中进行的其他标准和政策（主要是自愿性可持续标准）的研究结果。

(2) Identify the gaps in the existing laws and regulations, and enforcement of existing laws and regulations, where possible, on the national, provincial and local levels. Evaluate policies/regulation implementation. (i.e., whether local authorities have actually established the procedures for issuing permits, carrying out resource assessments, that are needed prior to enforcement actions.) Use the gaps identified to inform the development of training materials for government agencies.

2. 差距分析：

（1）评估政策、法律法规和标准的内容与可持续利用野生植物资源原则的差距。例如，当地主管部门是否真正建立了必要的资源评估程序、许可签发程序和资源利用人责任机制等方面）。

（2）评估政策、法律法规和标准的内容相对于实施情况以及现行资源利用情况的差距分析：评价国家、省级和市级政策、法律法规和标准执行情况。分析野生植物资源利用产业，尤其是药用植物资源利用（如中医药行业）产业与可持续利用原则之间存在的差距。

就执行情况评价和产业利用情况与可持续原则之间的差距，编制指导相关政府机构的培训材料。

(3) Develop the recommendations for strengthening the existing policies and regulations. Resulting policy recommendations will examine how adjustment or formulation (where necessary) of policies and regulations that support business practices favourable to environmental protection and sustainable use of resources will be developed and how policies can ensure there is no detrimental impact on plants or the environment

3. 草拟加强（或填补）现有政策、法律法规和标准的政策建议：根据 1 和 2 的调研结果给出政策建议。建议需体现：（1）以可持续利用野生植物资源目标（如推广自愿性可持续利用标准，或建立行业标准等）。（2）以激励及私营部门实施可持续利用资源和环境保护的商业行为，吸引私营部门参与野生植物资源管理和政策决策的机制（如对资源保护和恢复型企业给与政策倾斜和税收优惠等）。政策建议将探索如何进行优先的政策调整或制订（必要时）以确保政策对植物或环境不会产生重大的负面影响。

### Methods 方法

Develop and establish the methods, work plan and timeline to achieve the scope and objectives of this consultancy.

书面制定研究方法、工作计划和时间表，达成本次咨询工作涉及的范围和目标。

Review the existing policies and regulations that are relevant to the wild collection, cultivation, management plants, and TCM production of plants, regulation of the TCM sector at three levels: international, national (China) and provincial (Zhejiang and Hunan provinces) levels.

搜集、整理和研究现有的采集、培育、野生植物和资源管理相关政策、法律法规和标准，包括国际、国家（中国）和省级（浙江和湖南）和市级（浙江丽水地区）。

Identify the gaps in the existing laws and regulations, and enforcement of existing laws and regulations and evaluate policies/regulation implementation, where possible, on the national and provincial levels. An example can be made by using project target species.

差距分析：即现有法律法规内容和执行情况与可持续利用原则之间的差距。可以项目目标物种作为例评估国内和省政策/法规/标准的实施情况。

Interview relevant government agencies and research institutes, as well as relevant TCM companies and associations to consult on the relevant policy recommendations.

采访咨询相关政府机构，行业协会和研究机构，以及中医药企业和协会，就政策建议搜集信息和意见、建议。

Develop the recommendations for strengthening the existing policies and regulations, to be presented and discussed at the multi-stakeholder consultation meetings.

研讨会展示政策建议并多利益相关方磋商会议上开展讨论。多利益相关方磋商会议由项目组安排。

Develop final policy report: review, gaps, and recommendations, to be presented at the final project workshop. 完善报告，并在项目最后总结会上进行全面地成果介绍。

Data provided for the study 为研究提供的资料:

The project report: ‘A Review and Comparison of Relevant Medicinal Plant-Related Standards and Policies in China and Internationally’ carried out under the EGP MAPs consultancy.

项目报告：在 EGP MAP 项目中推出的“中国和国际药用植物相关标准与政策对比评估研究”

The project report ‘Research on Laws and Regulations governing Wild Medicinal Plants Conservation and Management in Sichuan, Shaanxi and Gansu Provinces’ conducted under the ECBP project.

项目报告：在 ECBP 项目中推出的“四川、陕西和甘肃省野生药用植物保护和管理法律法规研究”

Project target species list.

项目目标物种清单

Extraction of Policy Implications of EGP Partnership Projects from EGP policy team

EGP 政策团队提供的 EGP 合作伙伴关系项目政策意义摘要

FairWild Standard and Indicators (Chinese and English Version)

FairWild 标准和绩效指标中英文文稿。

Results and outputs 项目成果:

Deliverables 成果
Outline document: methods, work plan and timeline 提纲：方法、工作计划和时间表
Develop final policy report : Review the existing policies and regulations; Identify the gaps; Evaluate enforcement; and Make recommendations in Chinese and English 制作最终政策报告：现有政策与法规研究；差距分析研究；评估执行情况；政策建议（中英文）

<p>Interviewer lists and reference</p> <p>采访者名单与参考信息</p>
<p>PPT summary of the report in Chinese and English</p> <p>制作中英文 PPT 对报告进行摘要</p>
<p>Training materials in Chinese</p> <p>针对相关政府部门的中文培训材料</p>
<p>Total 合计</p>

# IX. ANNEX 2. The list of reviewed China's Regulations and Industrial Policies applicable to Collection, Management and Use of Medicinal Plant Resources

## 1. National Laws

涉及药用植物资源保护与利用的代表性国家法律主要有《中华人民共和国宪法》、《中华人民共和国中医药法（征求意见稿）》、《中华人民共和国药品管理法》、《中华人民共和国森林法》、《中华人民共和国农业法》、《中华人民共和国草原法》、《中华人民共和国种子法》、《中华人民共和国刑法》、《中华人民共和国海关法》、《中华人民共和国环境保护法》、《中华人民共和国水土保持法》和《中华人民共和国防沙治沙法》。

Major laws in relation to the protection and use of medicinal plant resources include the *Constitution of the Peoples Republic of China*, *Law of the People's Republic of China on Traditional Chinese Medicines (Draft for Comment)*, *Drug Administration Law of the People's Republic of China*, *Forestry Law of the People's Republic of China*, *Agriculture Law of the People's Republic of China*, *Grassland Law of the People's Republic of China*, *Seed Law of the People's Republic of China*, *Criminal Law of the People's Republic of China*, *Customs Law of the People's Republic of China*, *Law of the People's Republic of China on Environmental Protection*, *Law of the People's Republic of China on Water and Soil Conservation*, and *Law of the People's Republic of China on Desert Prevention and Transformation*.

### （二）行政法规

## 2. Administrative Regulations

涉及药用植物资源保护与利用的代表性行政法规主要有《野生药材资源保护管理条例》、《中华人民共和国野生植物保护条例》、《中华人民共和国濒危野生动植物进出口管理条例》、《中华人民共和国中医药条例》、《中华人民共和国药品管理法实施条例》、《中华人民共和国森林法实施条例》、《中华人民共和国自然保护区条例》、《退耕还林条例》、《中华人民共和国进出口货物原产地条例》和《中药品种保护条例》。

The representative administrative regulations in relation to the protection and use of medicinal plant resources include *Regulations on Protection of Wild Medicinal Resources*, *Regulations of the People's Republic of China for Protection of Wild Plants*, *Ordinance of the People's Republic of China on Wildlife Conservation*, *Regulations of the People's Republic of China on the Administration of the Import and Export of Endangered Wild Fauna and Flora*, *Regulations of the People's Republic of China on Traditional Chinese Medicines*, *Rules for Implementation of the Law of the People's Republic of China on Drug Management*, *Rules for Implementation of the Forest Law of the People's Republic of China*, *Regulations of the People's Republic of China on Nature Reserves*, *Regulations of*

*Conversion of Farmland to Forest, Regulations of the People's Republic of China on the Origin of Imported and Exported Goods, and Regulations on Protection of Types of Traditional Chinese Medicines.*

(三) 部门规章

### 3. Departmental Rules

涉及药用植物资源保护与利用的代表性部门规章主要有《甘草和麻黄草采集管理办法》、《进口药材管理办法（试行）》、《药品进口管理办法》、《农业野生植物保护办法》、《湿地保护管理规定》、《森林和野生动物类型自然保护区管理办法》、《野生动植物进出口证书管理办法》、《中华人民共和国海关对旅客携带和个人邮寄中药材、中成药出境的管理规定》、《森林采伐更新管理办法》、《天然林资源保护工程森林管护管理办法》等。

The representative department rules in relation to the protection and use of medicinal plant resources mainly include *Measures for Collection and Management of Licorice and Ephedra Sinica, Measures for the Administration of Imported Medicinal Materials (Trial Edition), Administrative Measures for the Import of Drugs, Measures for the Protection of Wild Agricultural Plants, Provisions on Administration of Wetland Conservation, Measures for Administration of the Nature Reserves of Forest and Wild Animals, Measures for Administration of Wildlife Import and Export Licensing, Provisions of the Customs of the People's Republic of China on Administration of Outbound Medicinal Materials and Tradition Medicines Carried by Passengers and Mailed by Individuals, Measures for Administration of Forest Felling and Regeneration, and Measures for Management and Maintenance of Forests under the Natural Forest Resources Conservation Programme.*

(四) 产业政策

### 4. Industrial Policies

涉及药用植物资源保护与利用的代表性产业政策主要有《国务院关于扶持和促进中医药事业发展的若干意见》、《中共中央关于全面推进依法治国若干重大问题的决定》、《关于进一步加强中药材管理的通知》、《关于加强生物物种资源保护和管理的通知》、《关于加强湿地保护管理的通知》、《关于切实加强森林资源保护管理的通知》、《关于加快推进生态文明建设的意见》、《关于严格天然林采伐管理的意见》、《关于促进野生动植物可持续发展的指导意见》、《关于进一步加强森林资源管理工作的意见》、《关于切实加强野生植物培育利用产业发展的指导意见》、《关于进一步加强生态保护工作的意见》、《关于加快特色经济林产业发展的意见》等。

The key industrial policies concerning the protection and use of medicinal plant resources include the *State Council Opinions to Support and Foster the Development of Traditional Chinese Medicines, CPC Decision on A Number of Major Issues in Comprehensively Carrying Forward the Rule of Country by Law, Circular on Further Strengthening the Management of TCM Materials, Circular on Strengthening the Protection and Management of Biological Species Resources, Circular on Strengthening Wetland Conservation and Management, Circular on Strengthening the Conservation and Management of Forest Resources, Opinions on accelerating the construction of ecological civilization, Opinions on Tightening Felling Management of Natural Forest, Guiding Opinions in Support of Sustainable Development of Wild Fauna and Flora, Opinions on Improving Forest Resources Management, Guiding Opinions on Promoting the Development of Wild Plant Cultivation and Utilization*

*Industry, Opinions on Further Improving Ecological Conservation, Opinions on Accelerating the Development of Under-Forest Economy.*

#### (五) 发展规划

#### 5. Development Programmes

涉及药用植物资源保护与利用的代表性规划纲要主要有《中医药创新发展规划纲要(2006—2020年)》、《中医药健康服务发展规划(2015—2020年)》、《中药材保护和发展规划(2015-2020年)》、《中医药事业发展“十二五”规划》、《中国生物多样性保护战略与行动计划(2011-2030年)》、《中国21世纪初可持续发展行动纲要》、《全国生物物种资源保护与利用规划纲要》、《中国森林可持续经营指南》、《林业发展“十二五”规划》、《生物产业发展规划》、《全国生态保护“十二五”规划》等。

The foremost development plans concerning the protection and use of medicinal plant resources are the *Outline for the Innovative Development Programme of Traditional Chinese Medicines (2006-2020)*, *Programme for TCM Health Services Development (2015-2020)*, *TCM Materials Conservation and Development Programme (2015-2020)*, *the 12<sup>th</sup> Five-Year Programme for TCM Development*, *China's Biodiversity Conservation Strategies and Action Plan (2011-2030)*, *Programme of Action for Sustainable Development of China in the Early 21<sup>st</sup> Century*, *National Programme for Conservation and Use of Biological Species Resources in China*, *Guide on Sustainable Forest Management of China*, *the 12<sup>th</sup> Five-Year Programme for Forest Industry Development*, *Bio-Industry Development Programme*, and *the 12<sup>th</sup> Five-Year Programme for Ecological Conservation*.

#### (六) 标准规范

#### 6. Standards and Practice

涉及药用植物资源保护与利用的代表性标准规范主要有《中华人民共和国药典》(2015版)、《中药材生产质量管理规范(试行)》、《药用植物及制剂外经贸绿色行业标准》、《药品生产质量管理规范(2010年修订)》、《药品经营质量管理规范》等。

The representative standards and practices in relation to the protection and use of medicinal plant resources mainly include the *Pharmacopoeia of the People's Republic of China (2015)*, *Good Practice for Quality Control in TCM Material Production (Trial Edition)*, *Green Industrial Standards for Foreign Trade of Medicinal Herbs and Products*, *Good Practice for Quality Control in Pharmaceutical Production (2010 Revision)*, and *Good Supply Practice for Pharmaceutical Products*.

#### (七) 保护名录

#### 7. Protection Lists

涉及药用植物资源保护与利用的代表性法定保护名录主要有《国家重点保护野生药材物种名录》、《濒危野生动植物种国际贸易公约(2013年)附录》、《国家重点保护野生植物名录(第一批)》、《中华人民共和国植物新品种保护名录(第一批、第二批、第三批、第四批、第五批)》、《进出口野生

动植物种商品目录》、《中华人民共和国主要林木目录（第一批）》、《按照传统既是食品又是中药材物质目录（征求意见稿）》、《有关新食品原料、普通食品名单汇总》等。

The representative protection lists with legal binding and for the protection and use of medicinal plant resources include the *National List of Key Protected Wild Medicinal Species, Appendix to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (2013)*, *National List of Key Protected Wild Flora (I)*, *Protection List of New Flora Species of the People's Republic of China (I, II, III, IV & V)*, *Catalogue of Import and Export Wild Fauna and Flora Commodities*, *Catalogue of Main Forest Trees of the People's Republic of China (I)*, *Catalogue of Substances Taken as Food and TCM Materials by Tradition (Draft for Comments)*, and the *Summary List of New Food Ingredients and Common Foods*.

# X. ANNEX 3. The policy recommendations consultation inquiry format and most commonly received comments

## 意见征询表格 Consultation inquiry format

### 项目评价表

项目名称：中国药用植物资源可持续利用政策法规研究报告

1. 文献完整性： <input type="checkbox"/> 系统完整 <input type="checkbox"/> 比较完整 <input type="checkbox"/> 不完整	2. 方法科学性： <input type="checkbox"/> 科学性强 <input type="checkbox"/> 比较科学 <input type="checkbox"/> 不科学
3. 建议可行性： <input type="checkbox"/> 可行性强 <input type="checkbox"/> 比较可行 <input type="checkbox"/> 不可行	4. 报告质量： <input type="checkbox"/> 优秀 <input type="checkbox"/> 良好 <input type="checkbox"/> 较差
评价意见和建议： . . . . .	
评价者签名： _____ 年 月 日	



对研究报告的整体评价是收集文献资料系统完整，分析研究比较深入，提出的建议具有一定的可行性。Overall comment from all: It provides a complete collection of documentation, in-depth analysis, and practical and feasible recommendations.

#### 代表性意见 Typical comments:

- 国家新药审评中心：“报告思路开阔，条理清晰，文笔流畅”。
- 国家食药监局稽查局综合处：“报告资料完备，深入分析了药用植物资源保护领域相关的法规政策，比较了国内法规政策与国际公约指南的特点，提出了保护药用植物资源可持续发展的具体建议，对促进我国药用植物资源保护非常有意义”。
- 国家濒管办：“本报告整体水平优异，覆盖范围系统、广泛，结合了中外近期保护实践的主流趋势，加强资源利用方对野生资源保护投入的社会责任，对比我国主要成型于改革开放初期的资源保护法律法规框架作出适当、中肯的分析，鲜明并切中时弊地提出了具体可行的建议，为后期国家立法，各部门协同，加入行业协会、企业及民间组织的力量打下良好基础”。
- 国家中医药管理局医政司：该研究通过对国内外大量的有关药用植物采集、管理、利用方面的法规、规章和产业政策/system整理和深入分析，较全面地评估了现行法律法规与政策标准的应用情况、效果及存在的主要问题，从政策法规、体制机制、保护措施科技支撑、品牌标准、发展规划等全方位的提出政策建议。该研究方法合理，资料详实，评估分析有据支撑，结论具有说服力。研究报告框架清晰完整，提出的政策建议针对性强，明确可落地。特别是提出明确监管执法主体和资源所有人等建议，这是中药资源管理和发展中长期缺失的核心要素，建议将此报告通过社会组织向国务院有关部门递交，研究报告中的建议对促进中药资源可持续发展具有重要战略意义。

## XI. ANNEX 4. Policy proposal to the National People's Congress and to the Chinese People's Political Consultative Conference (in Chinese)

### 关于支持建立道地药材保护综合示范基地的建议

#### 提案内容：

道地药材是指在一特定自然条件、生态环境的地域内所产的药材，因生产较为集中，栽培技术、采收 加工也都有一定的讲究，以致较同种药材在其他地区所产相比品质更佳、疗效更好。道地药材是一种特殊的遗传资源和具有能够采取较高价格定位的药材资源；它的形成与发展凝聚了历代无数研究者、生产者的共同劳动成果和集体智慧结晶，具有科研、经济、文化的多重属性，在中医药的传承与发展中具有不可估量的作用。

#### 一、 我国道地药材发展现状

我国地域广阔，气候变化多样，地形结构复杂，加之因植物发生的历史因素，形成了丰富多彩的道地药材中药材资源种类。不同地域的地形、土壤、水分、气温和光照等诸方面不同的生态环境，造

就了不同产区地道药材，如中医药上通常按产地方位分的川药类、广药类、云药类、贵药类、怀药类、浙药类、关药类、北药类、西药类、南药类等。药材分布的生态环境不同，其外部形态、内部结构以及生理生化成分都不相同，不少药材的产地不同其疗效有明显差异。

1982 年国家制定了对全国中药资源进行系统调查研究的计划，普查历时 10 年。结果表明，我国中药资源达 12807 种。其中药用植物 11146 种，涉及 383 科，2309 属，11146 种（含亚种、变种等种下等级）；药用动物 1581 种，涉及 415 科，861 属，共计 1581 种；药用矿物 80 种。在药用植物中，藻类 115 种，菌类 292 种，地衣类 52 种，苔藓类 43 种，蕨类 456 种，种子植物类 10188 种。我国是世界药用资源最丰富的国家之一，资源最丰富的地区要数西南和中南，约占全国种类的 50~60%，华东和西北地区居中，约占 30%，东北和华北地区约占 10%。一批相关书籍如《中国本草图录》、《新华本草纲要》、《中药志》、《中国常用中药材》等系列专著亦先后出版。在我国的中药资源中许多是著名的地道药材。近年来，利用分子生物学方法通过研究地道药材基因表达产物（蛋白质），遗传物质（核酸）等，研究地道药材的遗传规律和生物学本质，包括药材性状、组织结构、有效成分含量及疗效等。

建国以来，我国政府一直非常重视药用资源的保护工作，并注重研究栽培道地药材。经长期人工驯化，栽培的道地药材形成与野生品完全不同的药材性状和品质，构成独立的人工居群，将川芎、蕲艾等道地药材在《中国植物志》作了命名，使其遗传资源的客观性得到认可。道地药材引种方面，在全国重要的 10 个植物园及药用植物园中，已引种中药材 3000 种以上，其中一部分是著名地道药材。一些重要的产自国外的中药及药用植物也已在国内引种成功，建立了药材产区如西洋参、白豆蔻、马钱子、丁香、番泻叶及非洲罗芙木等。珍稀濒危道地药材代用品的研究工作正在进行，已有人工牛黄、人工麝香等药材面市，虎骨的替代品正在研究之中，但缺口仍较大。

野生中药材资源急需保护。根据中国中药材协会的统计，每年野生药材消耗量占全国中药材消耗总量的 30%，且全产业应用的品种有 70% 来自野生。同时一些民族药也大量消耗野生资源。另一方面，中药材出口（原料或提取物等形式）量逐年增加，国际市场对野生产品尤其关注。这些情况说明野生药材资源面临持续而巨大的消耗压力。中药材企业必须实现可持续利用野生资源，以满足中药行业的长远发展。同时野生资源的保护对生物多样性遗传和维护健康的生态系统至关重要。

## 二、 我国道地药材发展存在的主要问题

我国道地药材发展的主要问题是综合开发利用程度较低，只停留在第一产业层面，缺乏对道地药材资源的科研、经济、文化的多重属性的综合开发利用，一些道地药材品牌形象还没有完全建立，还没形成影响力；道地药材种植的生态优势在促进经济社会发展的拉动作用没有得到很好地发挥；药材加工水平、层次不够，与现代化水平要求差距较大，缺乏市场竞争力；种植以农户分散种植为主，种质资源保护和良种繁育体系尚未有效建立；农户规范化种植程度低，缺乏统一的标准体系，药材质量参差不齐；企业加工技术创新不足，产品附加值不高，企业科技创新投入不足，没有高附加值的产品；没有积极拓展国际市场，没有充分研究国际市场的需求和进入标准。

另外，我国道地药材产业缺乏发展模式创新。我国虽然道地药材资源丰富，但输出道地药材品牌价值的渠道不多、发展模式创新不够。

## 三、 发展我国道地药材的思考和建设

道地药材是传统医药文化的重要组成部分。在传统中医药文化中，道地药材等动植物入药的发现，是中华民族对人类医学、社会、文明的重大贡献。药用动植物是珍贵的自然资源，是人类的宝贵财富，也是中医药赖以生存与发展的物质基础，与中国人民乃至世界人民的健康有着十分密切的关系。道地药材是在一定的自然条件、生态环境和地域内所产的药材，具有独特医疗保健价值，它的形成和演变不仅与遗传、环境及生产实践有关，而且是凝集着历代无数研究者和生产者共同劳动和集体智慧的结晶。道地药材作为一种特殊的遗传资源和文化载体，具有科研、社会经济、文化的多重价值，在传统文化的传承与生态文明传播中具有不可估量的作用。

对道地药材资源进行综合开发利用，挖掘道地药材的科研、经济、文化等多重属性不仅是推动中药产业和道地药材可持续发展的抓手，也将有利于促进我国实现生态文明目标。我国目前很多地方已经开始在道地药材产业发展模式上进行探索和创新，中国医药物资协会、世界中医药学会联合会、世界自然基金会/国际野生生物贸易研究组织、道地药材国际贸易联盟共同参与了欧盟发起的中国医药企业参与环境保护与可持续发展项目（EGP），旨在培训道地药材采集者、生产商、贸易商的可持续利用药用资源的意识，推动当地野生药材资源和生态环境进行保护，促进当地民生改善、经济社会可持续发展。

结合我们开展欧盟项目的经验，为了推动我国实现生态文明和环境保护的目标，建议

一、在有条件的地区设立“道地药材保护综合示范基地”（简称：“示范基地”），综合示范基地建设可以分为三个层次：

1. **重点道地药材品种保护示范基地建设。**各地根据当地气候和土壤条件，选择一些主要道地药材品种，建立重点品种道地药材保护示范基地。

2. **道地药材保护企业示范基地：**选择有较好业绩、较高企业社会责任的道地药材种植、生产、加工企业作为道地药材保护示范单位。

3. **道地药材保护发展综合区示范基地：**选择具有道地药材资源的区域（村、镇、区、县）设立道地药材保护发展综合示范区。

建立示范基地，建议有关部门在提供法律保障、政策支持、经济优惠、科技支撑，并且加大宣传力度和民众普及。

二、鼓励中药行业开展可持续利用野生药材，采用自愿性可持续标准，保护野生资源发挥作用

：

1. **加强行业协会的作用。**将可持续利用野生药用植物资源纳入行业协会的宗旨之一。中药行业协会有责任引导中药企业实现可持续野生中药材。通过培训，考察学习，制定可持续利用野生中药材指南和行业评选等手段鼓励企业承担环境责任。

2. **促进自愿性可持续标准和认证体系在中药行业的应用。**在国家强制标准的基础上，鼓励企业采纳自愿性可持续标准，实现负责任的生产和惠农贸易。中药类产品参加可持续产品认证体系，可以提高产品附加值和国际竞争力。

建立道地药材保护综合示范基地和促进中药行业可持续利用药用植物资源，可是实现以下目标：

**1. 从科研的层面**，开展对道地药材遗传资源进行研究，实施有效保护。利用我国已有的科技力量，联合国内外相关科研机构，学术团体，对我市道地药材的遗传资源进行科学研究，保护种质资源，构建良种繁育体系。

**2. 从经济的层面**，积极开展道地药材国际贸易，实现我国道地药材发展模式的探索与创新，利用国际贸易平台来促进我国道地药材国际贸易，树立我国道地药材商业品牌，提升道地药材的附加值。积极探索国外市场认可的品质要求和产品标准，突破“绿色壁垒”打入国际市场，为中国企业和社区争取更多的经济收益。

**3. 从生态与养生层面**，道地药材的规模化种植，不仅可以绿化和改善生态环境，也将会带动新的旅游业态，实现“美丽华夏、养生中国”的生态休闲养生的生态文明发展目标。建立道地药材保护发展综合区示范基地，不仅可以保护生态环境，也可以促进中医药文化健康旅游和生态观光旅游业态的发展,形成“食养”、“药养”、“水养”、“体养”、“文养”为特色的中国特有休闲养生品牌。道地药材产业发展所带来的生态环境效应，将会改善我国生态环境，吸引更多的国内外游客的青睐。

**4. 从政策和体制方面**，道地药材走标准化的道路，必须引入和制订相应的可持续标准体系和准则，对道地药材的采集、种植必须走可持续道路。目前，国内还没有相应的标准，示范基地也肩负着标准实践的作用，并将成功的标准推广到整个行业并作为推向国际市场的重要步骤。

总之，通过道地药材保护综合示范基地建设，将道地药材发展纳入到重构人与自然和谐发展体系之中，不仅会进一步有效保护生态环境与人类生命健康，而且将会促进经济社会可持续发展。

中国医药物资协会执行会长兼秘书长 刘忠良

## XII. ANNEX 5. Text of TRAFFIC's CBD CoP12 intervention

Joint Intervention by TRAFFIC, the wildlife trade monitoring network, WWF and IUCN  
On Agenda item 16.3 Biodiversity and Health

7 October 2014

This is a joint intervention of TRAFFIC, the wildlife trade monitoring network, WWF and IUCN. TRAFFIC is a strategic alliance of IUCN and WWF.

WWF, IUCN and TRAFFIC welcome the advanced draft of the State of Knowledge Review on the interlinkages between Biodiversity and Human Health, developed by the Secretariat of the Convention on Biological Diversity and the World Health Organization and other partners. The recognition of linkages between biodiversity and human health is highly relevant to the sustainable use and conservation of plants and animals that form the raw materials both of traditional and modern medicines.

Over 60,000 plant species are used for medicinal properties globally, providing sources of both traditional and modern medicines. The contribution of medicinal plants to traditional medicine systems is immense. It is estimated that one in five plant species threatened with extinction in the wild. Resources are urgently required to understand the status of medicinal plant resources, and implement tools to support capacity building for sustainable management of medicinal plants.

The FairWild Standard developed by TRAFFIC, IUCN, WWF and other partners provides an excellent best-practice framework for establishing such management systems. It is currently being rolled out at global level including through the Traditional Chinese Medicine supply chains in China.

A practical example of the links between biodiversity and health is the work of WHO, IUCN, WWF, and TRAFFIC who are working together to finalize guidelines on the conservation of medicinal plants. Such plants provide primary healthcare around the world, but it is essential that the use of the plants is sustainable. Such wild resources are also important for sustainable livelihoods. We call on CBD Parties, Secretariat and stakeholders to support and champion this work.

The finalization and implementation of the Guidelines will be instrumental in contributing to the delivery of Aichi Target 14 and Targets 7, 11 and 12 of the Global Strategy for Plant Conservation.

TRAFFIC, together with WWF and IUCN urges COP-12 to include an additional paragraph in its decision:

**4bis. Recognises the importance of medicinal plants in the delivery of primary health care and their contribution to livelihoods, welcomes the ongoing revision of the WHO/IUCN/WWF/TRAFFIC guidelines on the conservation of medicinal plants and encourages their application by Parties and relevant organisations as soon as they are available.**

TRAFFIC, the wildlife trade monitoring network, is the leading non-governmental organization working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.

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