



A POCKET GUIDE FOR THE SUSTAINABLE COLLECTION OF JIAOGULAN, WOOLLY FERN, AND OTHER MEDICINAL AND AROMATIC PLANTS



HOW TO USE THIS GUIDE

This pocket guide sets out general guidance for collectors of medicinal and aromatic plants (MAPs) on sustainable wild harvesting, post-harvesting processing, and good social and fair trade practices.

This guide should be used in conjunction with up-to-date collection rules/instructions and collection maps.

This guide focuses on two MAP species: Jiaogulan *Gynostemma pentaphyllum* and Woolly Fern *Cibotium barometz*, but the basic principles provided are also applicable to the harvesting and processing of other species.

This pocket guide is based on the principles of sustainable wild-harvesting and equitable trade enshrined within the FairWild Standard (www.fairwild.org) and other reference materials (see list at the end of this publication).

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WHICH SPECIES CAN BE LEGALLY WILD-COLLECTED?

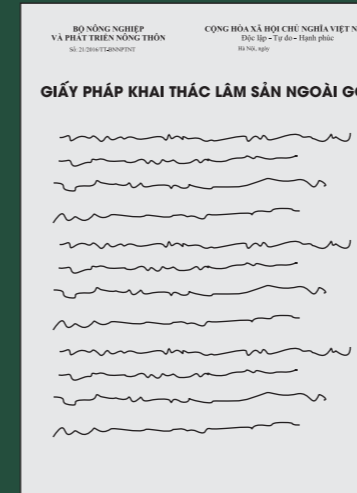
Contact the head of your collector group for more information about:

- Decree 60/2013/NĐ-CP, which sets out regulations for which species can and cannot be harvested.
- CITES-listed species (e.g. Woolly Fern) - collectors must follow CITES requirements for the collection and trade of these species.

Remember!

It is illegal to collect in protected areas. Contact your local Forest Protection Department (FPD) to find more information on where you can collect.

DO YOU HAVE A HARVESTING PERMIT?



To legally participate in wild MAP collection, under Decision 435/2010/QĐ-UBND, collectors must receive formal permission from authorities (e.g. commune people's committee for harvesting permissions, FPD for transportation licenses) to harvest and trade MAP resources.

BENEFITS OF JOINING A COLLECTION GROUP

- Collector groups will represent and protect the interests of their members.
- Members of collector groups are officially registered with the collection management authority.
- Collectors have opportunities to increase capacity:
 - through access to training.
 - through the support from the government.
 - through better market access and stronger negotiating power.



POINTS TO CONSIDER WHEN NEGOTIATING WITH BUYERS

- It is important for each collector to have a formal agreement with the group/organisation to ensure his/her rights and benefits are protected. The organisation will have an agreement with buyers to safeguard these protections.
- Talk to a representative of your group or collective to know your rights and benefits.
- Communicate to your collector group or organisation about the quality and quantity of species being collected and sold.



You have the right to be a part of price negotiations

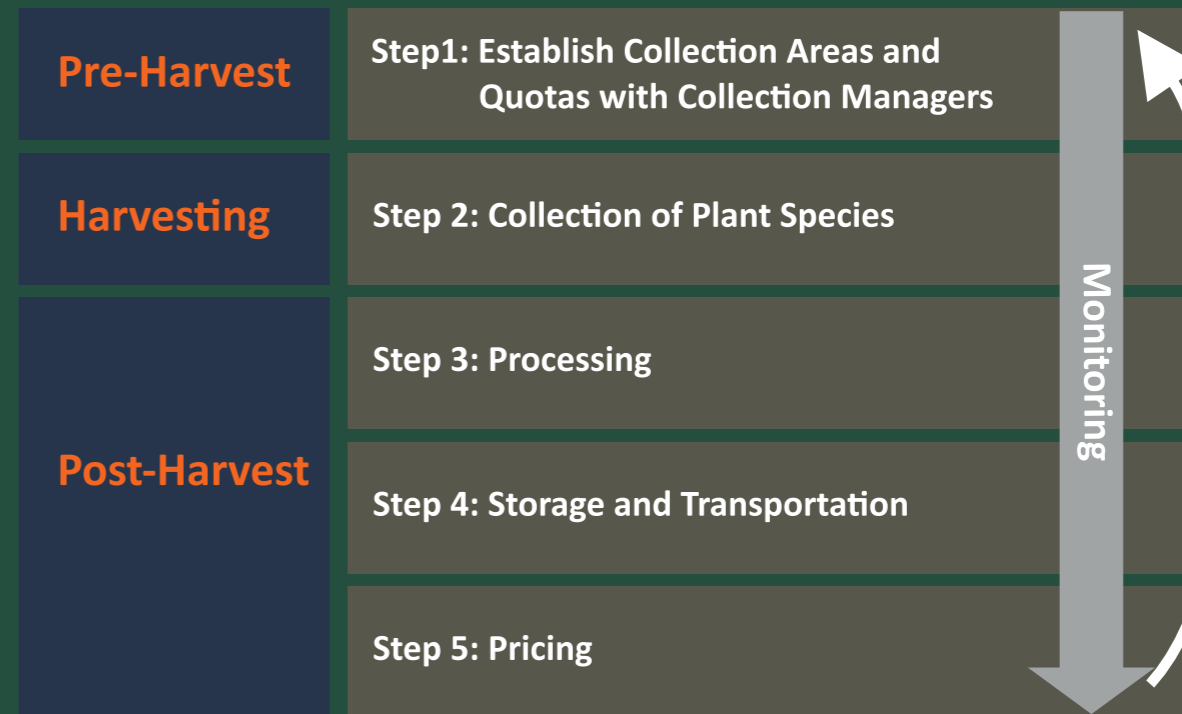
- Prices are set in relation to market price and cost of production including:
 - collection
 - transportation
 - processing
 - operating costs

Understanding your costs can help to negotiate a better price

- The price and time of payment for a product is negotiated between collectors and purchasers

Remember!

As part of a co-operative or group, you have more negotiation power and may get a higher price for your product. Meeting quality requirements can also increase the value of your product.



PRE-HARVEST

IT IS IMPORTANT THAT COLLECTORS PARTICIPATE IN ESTABLISHING COLLECTION AREAS AND QUOTAS. THIS INCLUDES:

- Determining the boundaries of collection areas.
- Agreement on where the collection activities are allowed and where they are **not** allowed.

- Boundaries will change following each annual inventory
- Zones excluded from collection:

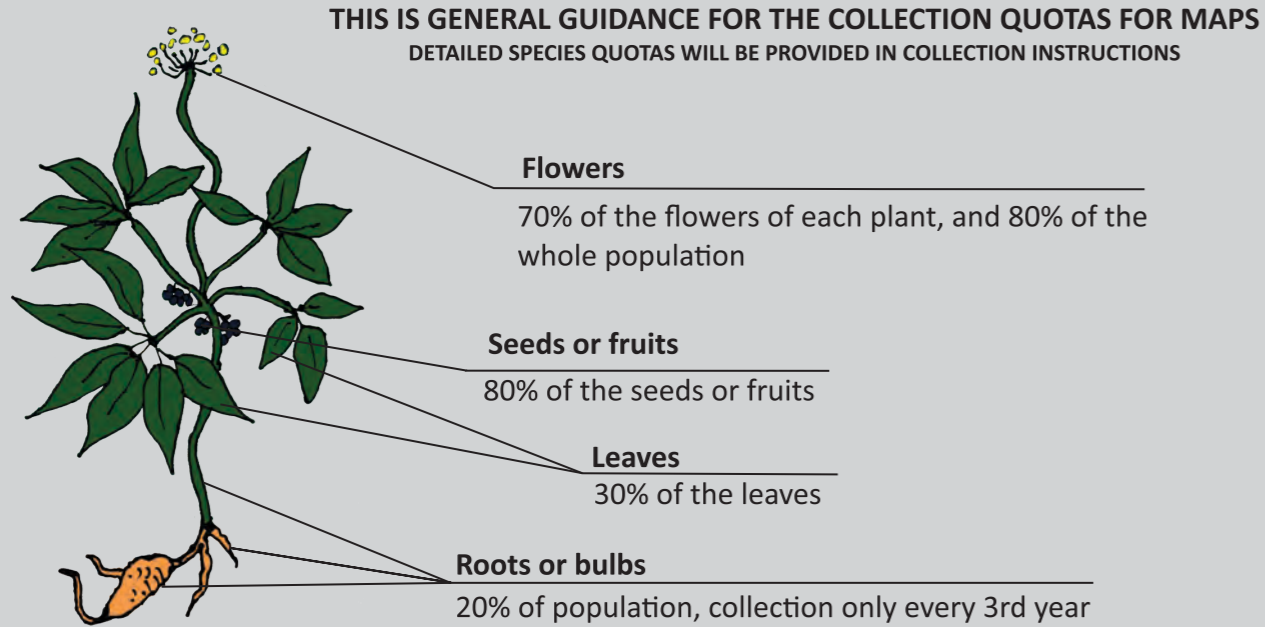
Please note!

Protected areas
Contaminated areas
Mining sites

Villages
Roads

ESTABLISH COLLECTION QUOTAS

COLLECTION QUOTAS SHOULD BE DISCUSSED AND AGREED UPON BY COLLECTORS, RESOURCE OPERATORS/MANAGERS



Remember !

- Species inventories must be conducted to determine these quotas
- Some species cannot be collected

JIAOGULAN – GUIDELINES ON COLLECTION

JIAOGULAN – *Gynostemma pentaphyllum*

50%

Maximum quota: 50% of available mature individuals

plant's growth

50 cm

Do not collect all of the plant body
Leave knee-length height (50cm) of the bottom of the plant for regeneration

Harvesting Cycle: Determine and agree on collection schedule – you can usually return to the same collection area to harvest after 30 – 45 days of optimal growth

30 – 45 days

30 – 45 days

30 – 45 days

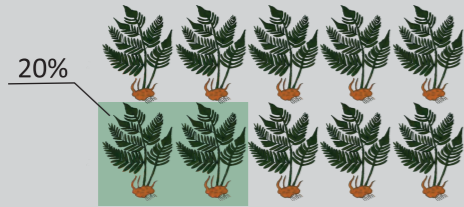
30 – 45 days

Harvesting Cycle

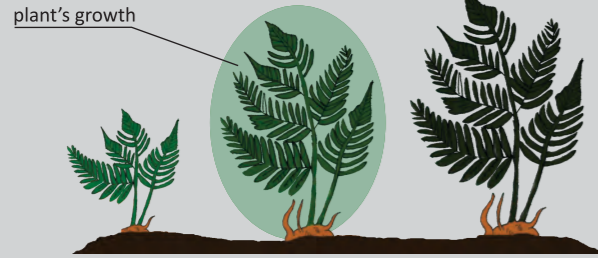
Be sure to consult collection instructions!

WOOLLY FERN – GUIDELINES ON COLLECTION

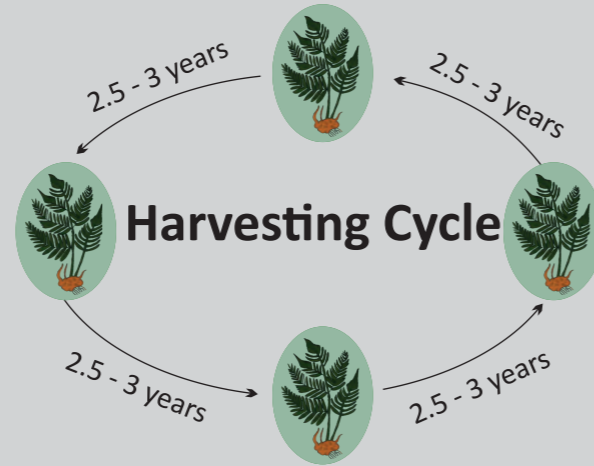
WOOLLY FERN – *Cibotium barometz*



Maximum sustainable quota: harvest up to 20% of mature individuals



Collect mature stalks only, not too young or too old.



Harvesting Cycle: Determine and agree on collection cycles – you can usually return to the same collection area after 2.5 – 3 years

Be sure to consult collection instructions!

HARVESTING

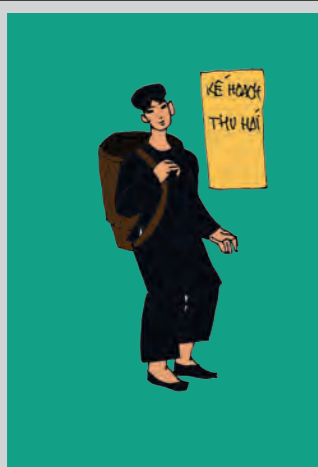
FOLLOW THESE STEPS TO ENSURE SUSTAINABLE COLLECTION

BE AWARE!

Harvesting should not damage the regeneration of the harvested species – Make sure only to collect parts that are used, do not be wasteful

TIME

FOR ALL SPECIES



Collect only according to collection schedules



Collect in the morning to reduce damage to species



To ensure you maintain the highest quality in collection, avoid collecting in wet, rainy conditions or extremely high humidity as it may damage the plant



Do not harvest plants when they are flowering or seeding

Don't Forget

- Clean cutting tools and containers thoroughly
- Keep collected species separate

METHODS

To reduce the risk of injury and improve the quality of the product, collect only using dedicated cutting tools and harvesting clothes including: gloves, boots, and gauze masks.

Collect:

- only in agreed collection areas (refer to collection maps)
- mature plant parts first
- from abundant populations first then collect from smaller populations
- only the amount defined in the collection quota

Don't Forget

Do not harvest plants in or close to potential contamination areas: human settlements, agricultural areas, major road sides, mining zones, industrial zones, garbage dumps

MONITORING HARVEST

TO HELP YOUR COLLECTION GROUP TRACK COLLECTION AND MAINTAIN QUALITY,
RECORD HARVESTING INFORMATION IN THIS FORMAT

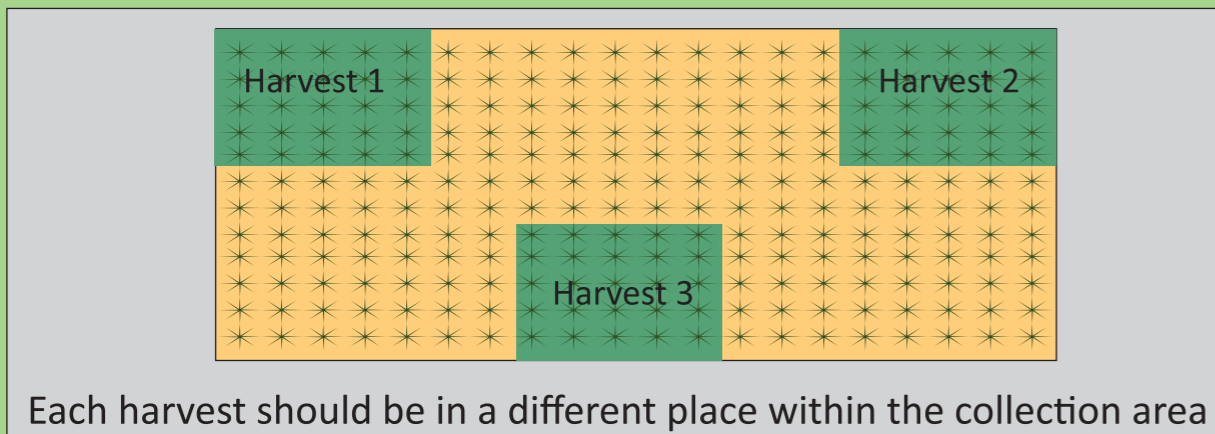
Record Sheet	
Name of harvester	
Name of species harvested	
Plant part	
Date of harvest	
Amount harvested	
Harvest area	

MONITORING HARVEST

RECORD AND GIVE THIS INFORMATION TO A REPRESENTATIVE OF THE GROUP

Recording sheet for species	
Type of information	Describe current status
How many plants did you collect this season?	
Are there more or less of the plant in the collection area?	
Did you notice any damage or slow growth to the plants collected?	
Have you seen any violation of regulations?	

ROTATIONAL HARVESTING:



- Plants need time to regenerate and reproduce:
 - Never collect all plants from the same part of the collection area
 - Do not return to the same site for collection more than once per collection season
- Continually monitor plant populations during harvesting and record observations

POST-HARVEST

TRANSPORTATION, PROCESSING, PRICING

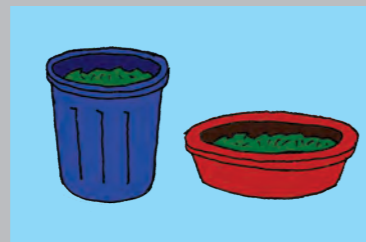
REMEMBER

- People responsible for operating the warehouse need to be properly trained
- Collectors must also be trained in warehouse operations
- Safety of individuals always comes first

RAW MATERIALS SHOULD BE PROCESSED RIGHT AFTER COLLECTION



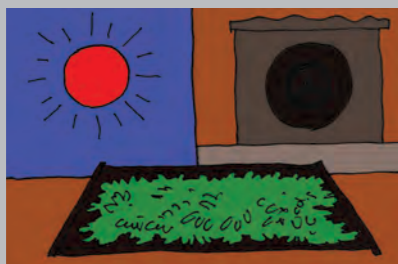
Transport materials to processing location



Use clean containers



Remove impurities
Wash the raw materials three times before cutting the raw materials



Dry under sunlight or with professional drying equipment
The temperature for the drying process in general should not exceed 60°C

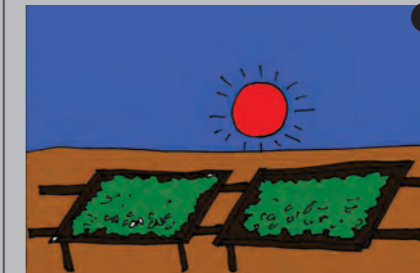


Record information about your processes to ensure transparency, accountability, and traceability

RAW MATERIALS SHOULD BE PROCESSED RIGHT AFTER COLLECTION



1
Remove impurities from Jiaogulan
Wash the raw materials three times with clean water



2
First dry – place washed materials under sunlight on drying scaffold



3
Separate leaves and stems if needed



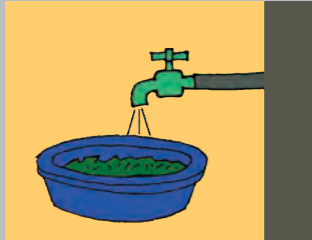
4
Cut the raw materials into pieces 2-3 cm long



5
Second dry – use a mechanical dryer, the temperature of drying process must not exceed 60°C

RAW MATERIALS SHOULD BE PROCESSED RIGHT AFTER COLLECTION

Remove impurities including fibres (hair) from woolly fern
Wash the raw materials three times with clean water

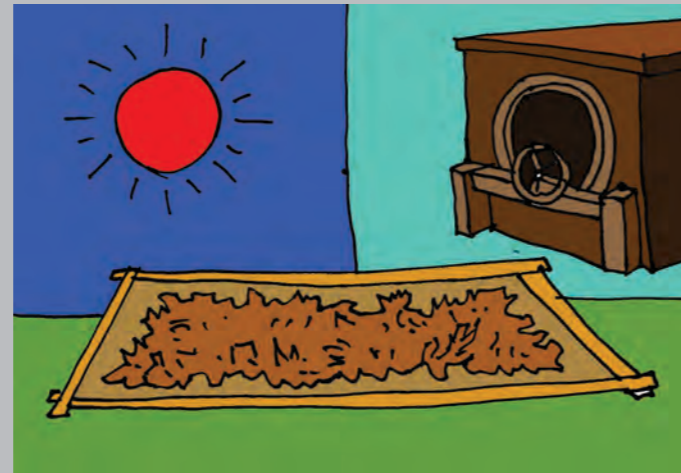


1



Slice the raw materials into pieces 4-6 mm thick (1/3 of a knuckle)

2



Dry the cut materials under sunlight on drying sheets or with a professional dryer – the drying temperature must not exceed 70°C (a thermometer should be used to monitor the temperature)

3

TO AVOID CONTAMINATION AND ENSURE QUALITY



Use only clean bags and containers that come from legitimate providers



Storage area must be clean, dry, and free from any chemical contaminants



Regularly clean the storage area



Ensure that the storage area is dry and away from animals

PACKAGING AND LABELING:

- After processing, materials must be packed and weighed
- Labeling must be done right after packing (see example label below)

Collection Organization :

Name of Product :

Collection Date :

Collection Area :

Processing Date :

Net Weight :

PACKAGING AND LABELING:

- All semi-processed products or finished products must be stored in the designated storage area
- All packages must be stored at least 20 cm off the floor
- Record information for storage in warehouse and include:
 - Name of product
 - Date of collection
 - Quantity
 - Quality of product
 - Name of deliverer
 - Name of receiver

TRANSPORTATION

- Use clean containers for all storage and shipping processes
- Attach all documents such as permits, transportation licence, reports, and other relevant documentation where relevant

WAREHOUSE

- Have proper warehouse protection measures: fire extinguishers, organic pest control, etc.
- The warehouse should be appropriate for the materials or products stored

English name: Jiaogulan

Vietnamese name: Giảo cổ lam, Giảo cổ lam năm lá, Rau đắng, Dền Toòng

Scientific name: *Gynostemma pentaphyllum* var. *pentaphyllum*



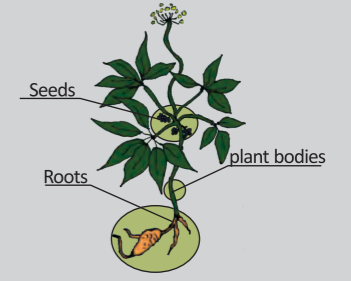
Quick Description:

Slender stalks with 5-7 leaves at the end, bright green; bitter-sweet taste



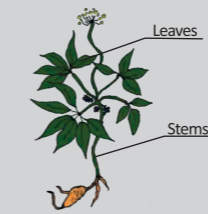
Habitat & Ecology:

Grows in forests, thickets or mountain slopes; 300-3200 meters in elevation



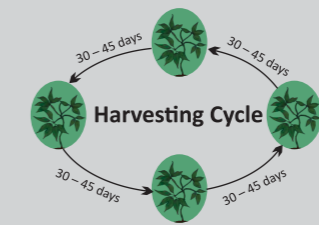
Regeneration:

From seeds, mature roots or plant bodies



Harvestable Parts:

Leaves and Stems



Harvesting cycle:

30 – 45 days



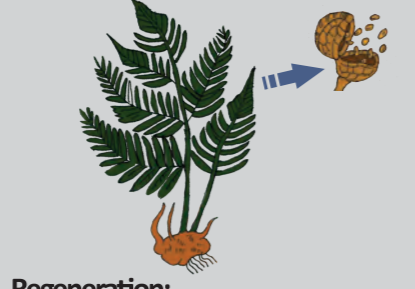
Market Specifications:

Raw rhizomes are cut and dried to sell to companies

English name: Woolly fern, golden chicken fern
Vietnamese name: Cầu tích, Cây lông cu li, Cút Li, Cút Lĩnh
Scientific name: *Cibotium barometz*

Quick Description:

Plant bodies can be 2.5 – 3 metres high. Plants grow in wet and bright conditions but are capable of coping with drought once mature



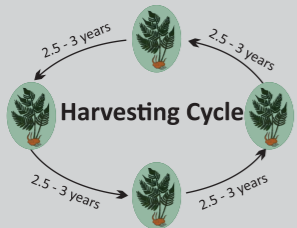
Regeneration:

Spores and new growth from mother-branches



Harvestable Parts:

Rhizomes



Harvesting cycle: 2.5 – 3 years



Market Specifications:

Raw rhizomes are cut and dried to sell to companies

NOTE:

This species is CITES Appendix II listed (follow the procedures of Viet Nam's CITES Management Authorities if you harvest and export this plant)



If MAPs are collected and traded following the FairWild Standard, and under the FairWild certification process, buyers are required to:

- pay more per kilogramme of purchased MAPs.
- pay into the FairWild Premium Fund for a community social development fund.

Market premiums may also be available for organic certification, and meeting other quality requirements of your buyer.

For more information visit: www.FairWild.org.

For questions or more information, please contact:

TRAFFIC Viet Nam Office

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Email: tsea.gmp@traffic.org

Bac Kan Forest Protection Department (FPD)

Group 4, Duc Xuan Ward, Bac Kan City

Bac Kan Province

Tel: 02813878690

1. FairWild Foundation. (2010). *FairWild Standard: Version 2.0 / Performance Indicators*. FairWild Foundation, Weinfelden, Switzerland. 36 pp.
2. Institute for Marketecology. (2010). *Manual for sustainable wild collection practices*. 9 pp.
3. TRAFFIC (2014). A set of training materials developed in the project *Engaging China's private sector in sustainable management of medicinal plants—the multiplier effect*, funded by the European Union-China Environmental Governance Programme 32 pp.
4. TRAFFIC (2016). *Resource assessment findings, 2015-2016 Project Report*. 91 pp.