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### Regional Biotrade Project Southeast Asia (Vietnam, Lao PDR, Myanmar)



## CASE 1: Organic Chili in Vietnam



Selected because:

- An annual agricultural crop
- Clear export demand
- Benefits producers financially
- Unclear whether the is a meaningful biodiversity impact

Basic information:

- Produced in Cao Bang province
- Socially and environmentally committed partner company
- Product has multiple organic certifications





Not rare or endangered



Not a perennial product

Does not grow in mature ecosystems

Minor food source for pollinators

Animals living on it killed as pests

Not a host for epiphytic plants

- Organic chili is better than conventional, but overall does not contribute to biodiversity conservation
- Annual species grown in agricultural settings are unlikely to provide significant biodiversity benefits
- Exceptions may be possible:
  - If additional biodiversity-specific interventions are taken (i.e. biodiversity action plans)
  - If grown in a more complex system like polyculture
  - If the species itself is endangered and domestication takes pressure off wild stocks



## CASE 2: Siam Benzoin in Vietnam



- Siam benzoin is produced from Styrax tonkinensis, a fast growing tree that grows in disturbed areas
- Commonly planted for paper, but most resin from wild production
- Resin is tapped by cutting bark high above the ground
- Used widely in fragrances as a fixative, and for medical, flavour and other purposes
- Market is dominated by Laos, but production is being reestablished in Vietnam

#### A native species

Not rare or endangered

#### Perennial, up to 60 years

A key ecosystem species in early

**Does not grow in** mature ecosystems

Source of food for some animals

succession

Not known to be a host plant for nesting

Not a host for epiphytic plants

- Siam benzoin production has a positive impact on biodiversity
- Especially good where styrax forest areas link national protected areas
- Despite the positive impact there is a serious sustainability issue in the longer term
- Producers not allowed to maintain the forest in a state that would preserve benzoin production, but illegal cutting is widespread
- Could a policy of sustainable work better than ineffective protection?



## CASE 3: Indian Prickly Ash in Laos

- Zanthoxylum rhetsa is also a pioneering species,
- Berries used as a spice and a fragrance and flavour ingredient
- Can be harvested from wild stands, but also semi-domesticated
- In forest areas, often cut to harvest berries, more often picked when cultivated
- Best quality is from Huaphan province of Laos, in areas where other economic opportunities are limited



- Tree could become less common as agricultural practices change
- Some positive effects on pollinators and birds
- Cultivation in gardens can be combined with pasture for cattle
- Most important impact is at landscape level
- Provides an alternate income that does not require expansion of slashand burn cultivation





- Indian prickly ash has a positive impact on biodiversity and people
- Production could be expanded significantly if markets can be found
- Fits well with "Clean and Green" strategy for production
- Exporting these valueadded, intermediate products does not fit with export promotion policies (yet...)

## CASE 4: Jujube in Myanmar

- Two species, Ziziphus mauritana and Z. jujuba
- Both grow naturally in the central dry zone of Myanmar
- Fruit is collected and eaten immediately or dried
- Dried fruit used to make a variety of confectionaries, syrup, and powder
- Seed kernels are also used in Chinese medicine





- Jujube is highly drought resistant and well adapted to dry areas
- Provides food for a number of, birds, animals and pollinators
- Endemic bird, white throated babblers, use it
- A key species in the open savannah of the central dry zone, providing habitat for numerous animals
- A very positive species for biodiversity

- Jujube is especially good for women's economic inclusion
- Domestic market for syrup has grown rapidly, already providing benefits
- Accessing export markets for jujube powder and concentrated pulp would increase benefits further
- Currently only a few companies work with jujube
- Not a recognized priority product for government



- Take biodiversity into consideration when selecting products
- Engage with buyers that value biodiversity
- Partner with biodiversity expert organizations to support intervention on biodiversity topics
- Pay more attention to policy issues relevant to biodiversity in selected value chains





# **GROUP WORK**

Divide into three groups by country Review "Key Facts" sheet for your cases Work as a group, 20 minutes on each question

- Vietnam: Siam benzoin
- Laos: Indian prickly ash
- Myanmar: Jujube
- Note your answer to questions on flipchart and be prepared to present findings to other groups.