

Annex I

Reports of the sub-regional working groups***The Southeast Asia Working Group Report*****Member countries of working group:**

Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand and Vietnam.

Common areas of interest

Common areas of interest identified are listed in the table below. All of these are of national priority and need funding support.

| Recommendations | CAM | INS | LAO | MAL | PHI | THAI | VIE | total |
|---|------------|------------|------------|------------|------------|-------------|------------|--------------|
| Increase collaboration on evaluating FGR. | X | X | X | X | | X | X | 6 |
| Establishment of <i>ex situ</i> conservation stand | X | | X | X | X | X | X | 6 |
| Strengthening of national programmes on FGR. | X | | X | | X | X | X | 5 |
| Improve silvicultural methods for FGR conservation and management. | X | | | X | X | X | X | 5 |
| Increase education and training on FGR conservation and management. | X | | X | | X | X | X | 5 |
| Increase exchange of genetic materials. | X | X | | X | | X | X | 5 |
| Enhance research on demography, genetics and reproductive biology. | X | X | X | X | | X | | 5 |
| Generate financial support for FGR work and regional collaboration. | | X | X | X | | X | X | 5 |
| Increase assessments on the distribution of forest species. | | X | X | X | | X | X | 5 |
| Enhance domestication of rare, endangered and valuable species. | | | X | X | X | X | X | 5 |

Regional capacity building needs:

- Short and long term training on conservation methods, molecular population genetics, eco-geographical survey, planning of FGR programme, etc.
- Upgrading of equipments and facilities
- Scientist exchange/scientific collaboration/study visits
- Planning of FGR programme

APFORGEN priority species

52 priority species were identified as shown in the table below.

| Species | CAM | INS | LAO | MAL | PHI | THAI | VIE | Total |
|---|-----|-------|-------|------|------|------|------|-------|
| | DFW | CFBTI | NAFRI | FRIM | UPLB | RFD | FSIV | |
| Rattan | X | X | X | X | X | X | X | 7 |
| <i>Pinus merkusii</i> | X | X | X | | X | X | X | 6 |
| Bamboo | X | X | X | | X | X | X | 6 |
| <i>Hopea odorata</i> | X | | X | X | | X | X | 5 |
| <i>Pinus kesiya</i> | X | | X | | X | X | X | 5 |
| <i>Tectona grandis</i> | | X | X | X | | X | X | 5 |
| <i>Acacia crassicarpa</i> | | X | X | | X | X | X | 5 |
| <i>Azelia xylocarpa</i> | X | | X | | | X | X | 4 |
| <i>Aquilaria crassna</i> | X | | X | | | X | X | 4 |
| <i>Chukrasia tabularis</i> | | | X | X | | X | X | 4 |
| <i>Dalbergia cochinchinensis</i> | X | | X | | | X | X | 4 |
| <i>Dipterocarpus alatus</i> | X | | X | | | X | X | 4 |
| <i>Fagraea fragrans</i> | X | | X | X | | X | | 4 |
| <i>Hopea ferrea</i> | X | | X | | | X | X | 4 |
| <i>Pterocarpus macrocarpus</i> | X | | X | | | X | X | 4 |
| <i>Shorea roxburghii</i> / <i>S. cochinchinensis</i> | X | | | X | | X | X | 4 |
| <i>Tarrietia javanica</i> | X | X | X | | | | X | 4 |
| <i>Xylia xylocarpa/dolabriformis</i> | X | | X | | | X | X | 4 |
| <i>Gmelina arborea</i> | | X | X | X | X | | | 4 |
| <i>Acacia mangium</i> | | X | X | | | X | X | 4 |
| <i>Acacia auriculiformis</i> | | X | | X | X | | X | 4 |
| <i>Eucalyptus</i> spp. | | X | X | | | X | X | 4 |
| <i>Alstonia scholaris</i> | | X | X | | | X | | 3 |
| <i>Anisoptera costata</i> | X | | X | | | | X | 3 |
| <i>Casuarina equisetifolia</i> | | | | | X | X | X | 3 |
| <i>Melaleuca cajuputi</i> | | X | | X | | | X | 3 |
| <i>Pterocarpus indicus</i> | | | X | X | X | | | 3 |
| <i>Rhizophora</i> spp. | | | | | X | X | X | 3 |
| <i>Albizia lebbbeck</i> | X | | X | | | | | 2 |
| <i>Artocarpus heterophyllus</i> | | X | | | X | | | 2 |
| <i>Azadirachta excelsa</i> | | | | X | | X | | 2 |
| <i>Azadirachta indica</i> | | | X | | | X | | 2 |
| <i>Dalbergia bariensis\ oliveri</i> | X | | | | | | X | 2 |
| <i>Dipterocarpus grandiflorus</i> | | | X | | X | | | 2 |
| <i>D. tuberculatus</i> | | | X | | | X | | 2 |
| <i>Eusideroxylon zwageri</i> | | X | | X | | | | 2 |
| <i>Gonystylus bancanus</i> | | X | | X | | | | 2 |
| <i>Intsia palembanica</i> | | | | X | | X | | 2 |
| <i>Metroxylon sagu</i> | | | | X | X | | | 2 |
| <i>Parashorea stellata</i> | | | X | | | X | | 2 |
| <i>Parkia speciosa</i> | | | X | X | | | | 2 |
| <i>Shorea leprosula</i> | | X | | X | | | | 2 |
| <i>S. macrophylla</i> | | X | | X | | | | 2 |
| <i>S. ovalis</i> | | X | | X | | | | 2 |
| <i>S. parvifolia</i> | | X | | X | | | | 2 |
| <i>Toona sureni</i> | | | X | | | | X | 2 |
| <i>Cunninghamia lanceolata</i> | | | X | | | | X | 2 |
| <i>Diospyros mun</i> | | | X | | | | X | 2 |
| <i>Dysoxylum loureiri</i> | X | | X | | | | | 2 |
| <i>Erythrophleum fordii</i> | | | X | | | | X | 2 |
| <i>Fokienia hodginsii</i> | | | X | | | | X | 2 |
| <i>Toona ciliata</i> | | | X | | | X | | 2 |

APFORGEN modus operandi

The following suggestions for APFORGEN modus operandi were made:

1. APFORGEN to provide technical guidelines and methodologies.
2. Categorize, compile and disseminate information provided by Southeast Asia members.
3. Maintain list-serve and newsletter.
4. Language barrier: APFORGEN to help in translating FGR information in English into national languages for the non-English speaking countries.
5. Update, validate and list new initiatives on priority species.
6. Support funding or provide ways and means to find funding for collaborative FGR activities.
7. Support and facilitate scientific visits and attendance to international meetings.
8. Establish linkages and coordinate to deploy expertise in various areas for APFORGEN member countries.

Information dissemination

Suggestions for contents for the APFORGEN web site:

1. Technical reports
2. List of experts
3. Updated list of priority species
4. Current research activities
5. Maps of forests in each country
6. Red list of endangered species
7. Updated events all over the world that are related to FGR (e.g. seminar, conference, symposium etc)
8. Basic information in SE-Asia with reference to the priority species listed
9. Name, address and email of all the APFORGEN members
10. Job opportunities related to FGR
11. Ways to address problems concerning FGR
12. Sharing success stories concerning FGR
13. Research profile in each country (institutions)
14. Publication, books and journals
15. Member news
16. Link to various related sites

Suggested effective communication mechanisms among APFORGEN members:

1. Email: personnel in charge to check regularly and to respond promptly or to direct to expert who will respond more authoritatively
2. Tele-conferencing (Electronic forum) for any urgent issues
3. Formal letter for correspondence

The South Asia working group report

Member countries of the working group:

Bangladesh, India, Nepal, Pakistan, and Sri Lanka

APFORGEN Action Plan

Common Areas of Interest that have on-going national activities are:

1. Ecogeographic surveys
2. Genetic studies/population genetics
3. Reproductive biology
4. Germplasm collection, storing and propagation
5. Evaluation (species and provenance trials etc)
6. Tree improvement (including domestication)
7. *In situ* conservation
8. *Ex situ* conservation
9. Taxonomy
10. Ethnobotanical studies
11. Silvicultural systems
12. Agroforestry systems
13. Forest management guidelines
14. Wood products (manufacturing/marketing)
15. Non-timber forest products
16. Seed technology
17. Forest rehabilitation/restoration

Priority areas identified include:

1. Germplasm collection, storing and propagation
2. Pest and diseases management
3. Species selection, hybridisation
4. Asexual propagation (clone and tissue culture etc)
5. Reproductive biology
6. Non-timber forest products
7. Provenance trials and evaluation
8. *In situ* conservation
9. Wood products (manufacturing/marketing)
10. Ethnobotanical studies
11. Exchange of information in forest genetic conservation
12. Forest rehabilitation/restoration
13. Conservation policies and strategies

Regional capacity building needs identified include:

1. Participation in workshops/seminar/study tour/visits
2. Exchange of training materials and resource persons
3. Short-term/Long-term training courses
4. Production of training materials
5. Preparation and exchange of extension and public awareness materials and exchange of grey literature

APFORGEN priority species

The priority species suggested for regional activities are:

a) Species that are suitable for tree improvement and multiplication:

- *Albizia lebbek*
- *Albizia procera*
- *Artocarpus heterophyllus*
- *Azadirachta indica*
- *Cassia siamea*
- *Casuarina equisetifolia*
- *Chukrasia tabularis*
- *Hopea odorata*
- *Lagerstroemia ovalifolia*
- *Lagerstroemia speciosa*
- *Pterocarpus indicus*
- *Pterocarpus macrocarpus*
- *Rhizophora* spp.
- *Schima wallichii*
- *Tectona grandis*
- *Terminalia chebula*
- *Acacia nilotica*
- *Dalbergia latifolia*
- *Dalbergia sissoo*
- *Pterocarpus marsupium*
- *Shorea robusta*
- *Cedrus deodara*
- *Pinus wallichiana* subsp. *karakorma*
- *Adina cordifolia*
- *Bassia latifolia*
- *Schleichera oleosa*
- *Albizia odoratissima*

Species with conservation priority:

- *Acer caesium*
- *Artocarpus* sp.
- *Gmelina arborea*
- *Rhododendron* sp.
- *Taxus baccata*
- *Alnus nitida*
- *Celtis eriocarpa*
- *Fraxinus xanthoxyloides*
- *Grewia asiatica*
- *Prunus padus*
- *Saussurea lappa*
- *Ziziphus nummularia*
- *Diospyros ebenum*
- *Chloroxylon swietenia*
- *Acacia catechu*
- *Bombax ceiba*

Modus operandi

The modus operandi suggested for APFORGEN could include the following elements:

1. Activities to be carried out on a sub-regional approach. Three ecological zones are suggested: Temperate, Sub-tropical and Tropical.
2. APFORGEN may work through groups on timber, fuel, fodder, etc. as well as non-timber forest products (including rattan, bamboo, fruit, seeds, medicinal plants etc).
3. APFORGEN to conduct training need analysis, assist to locate funds and training institutions for capacity building.
4. APFORGEN should be flexible in the choice of priority of species and its sub-group activities.
5. APFORGEN to facilitate visits/attending of workshops by member countries and publication of scientific outputs.

Information dissemination

Suggestions of contents for the APFORGEN web site:

1. Recent technological development
2. Conservation status of plant species, national priority species
3. Future programme
4. Regional collaboration
5. Information on donor
6. List of expertise/ specialisation
7. Bibliography database; information database

Effective communication mechanisms among APFORGEN members:

1. Frequent meetings
2. Website/electronic mail