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Gender, Species Priorities and Domestication in South and Southeast Sulawesi, Indonesia

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AgFor SULAWESI   Canada   WORLD CONGRESS ON AGROFORESTRY DELHI – 2014

Background

Tree domestication includes any activity that brings trees into wider cultivation to provide food, building material, medicine or other products or income from the sale of tree products. It may also positively influence the conservation of endangered species, as well as provide environmental services.

Research on tree domestication is not merely focused on integrating trees on farms or community land, but also must consider socio-cultural-economic factors and institutional aspects that influence the domestication process.

Gender is an important factor in tree domestication that to date has not been sufficiently researched. Women and men have different sets of knowledge, experiences and strategies in addressing tree propagation, management, utilization and marketing (Kiptot and Franzel, 2011).

This study investigated gender roles in selecting priority species and the domestication of economically important species in South and Southeast Sulawesi.

South Sulawesi
Important commodities include cacao, coconut, clove, coffee and pepper and are mostly managed by smallholders. South Sulawesi consists of 57% forested area, 9%wet paddy system and 10% agriculture. Majority ethnic groups are Bugis and Makassar.

Southeast Sulawesi
The agriculture sector contributes 38% of the economy with cacao as the prime commodity. Production was 137,833 tonnes in 2010. *Metroxylon sagu* is a traditionally important staple food. Majority ethnic are Tolaki, Bugis and Java.

Top five priority species - ranking by gender per province

With GRoLUV as the method (Mulyoutami et al 2013), we identified the top five priority species, along with domestication preferences and division labour by gender. Focus group discussions were held with 300 community members (45% women) from 19 villages in 4 districts in South and Southeast Sulawesi province Indonesia. Men and women were disaggregated into different focus group discussions.
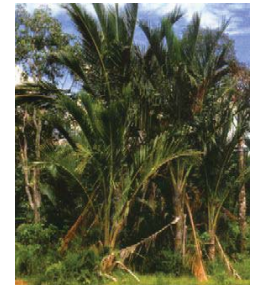
Gender	S	SE
Women	3	1
Men	3	1

Gender	S	SE
Women	>5	2
Men	>5	2

Gender	S	SE
Women	1	3
Men	1	>5

Gender	S	SE
Women	3	>5
Men	2	>5

Gender	S	SE
Women	NA	4
Men	NA	3

Gender preferences on domestication

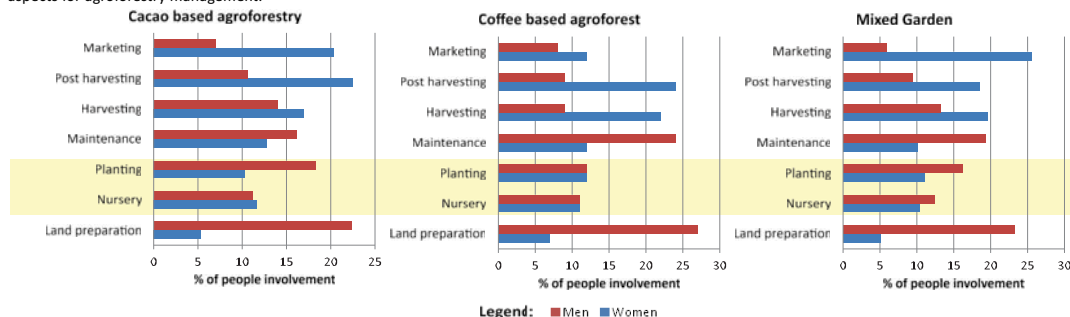| Gender	Species types (mean)					Important species (mean)				
	Vegetable	Fruit	Timber*	Tuber	Medicinal plants	Cacao	Coffee	Clove	Pepper	Sago
Men	14.46	36.68	50.4	41.67	6.9	87.27	69.38	73.6	74.63	68.12
	36.85	36.42	21.85	49.03	18.77	80.59	68.52	82.3	77.56	77.58

Note: * indicating statistically significance difference between men and women (T test)

Women tend to prioritize vegetable and medicinal species compared to men. The most significant difference in gender preferences is with timber species.

Men have higher preferences for cacao and coffee than women. Women prefer clove, pepper and sago which contribute to food security and nutrition.

Gender-based division of labour in different types of agroforestry

Women's role in seed selection and propagation is crucial for agroforestry development and biodiversity conservation. Their knowledge and skills, developed through the tasks they perform, are important aspects for agroforestry management.

Cacao based agroforestry — categories: Marketing, Post harvesting, Harvesting, Maintenance, Planting, Nursery, Land preparation. % of people involvement

Coffee based agroforest — categories: Marketing, Post harvesting, Harvesting, Maintenance, Planting, Nursery, Land preparation. % of people involvement

Mixed Garden — categories: Marketing, Post harvesting, Harvesting, Maintenance, Planting, Nursery, Land preparation. % of people involvement

Legend: Men, Women

Sago cultivation and processing

Activities	Men	Women
Seed collection	65%	35%
Tree selection	70%	30%
Cutting the trees	80%	20%
Beating out the sago pith	80%	20%
Starch processing	10%	90%

Conclusions

- Women are keen to domesticate vegetables and other annual crops that contribute directly to household food security and nutrition. Women focus their domestication activities on land near the home.
- Men and women give priority to tree species with high economic value; the management of those species is a priority for men but shared by women.
- Identifying gender roles and knowledge related to tree domestication is important to facilitate effective and successful planning related to tree-based livelihood enhancement and sustainable environmental management.

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