The FSP in the Philippines – Where does it fit and what can it achieve?

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Forage R & D activities in the country

Forage evaluation in the Philippines formally started in 1973 with the creation of the National R & D Team for Forage, Pasture and Grasslands under the coordination of Philippine Council for Agriculture Forestry and Natural Resources Research and Development (PCARRD). Anent to this, a network of R & D stations was established (Fig. 1).

Most of these stations were state colleges and universities (Table 1). The forage evaluation and selection process follows standard procedures:

1. Varietal collection, evaluation, and selection.

Germplasm collection. Seeds of different species are collected and planted in plots for seed increase and propagation. In the absence of seeds, root stocks or cuttings are used as planting materials.

Observational nursery trial. This unreplicated trial screens a large number of entries. Seed yield potential is determined at this stage.



Preliminary performance trial. The entries are those selected in the nursery trials. Exceptions are new introductions with enough seeds and which are known to have performed well in other locations. Each entry is planted in 2 m x 6 m plots, replicated four times. This trial determines which entries will be considered for regional trials.

2. Regional performance trials (on-station).

Entries, which showed high potential from the preliminary performance trials, were distributed to various stations nationwide (Fig. 1). Evaluation based on associative properties, performance under specific environmental conditions, and animal performance is done at this stage.

After this evaluation, the entries that performed better than the existing materials are recommended for distribution and wide-scale adoption.

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Table 1.	Institutions i	nvolved in	the existing	R & [D networl	K.

In	stitution	Location
1.	Mariano Marcos State University	Batac, Ilocos Norte
2.	Cagayan State University	Tuguegarao, Cagayan
3.	Isabela State University	Cabagan, Isabela
4.	Abra State Institute of Science and Technology	Lagangilang, Abra
5.	Central Luzon State University	Muñoz, Nueva Ecija
6.	Pampanga Agricultural College	Magalang, Pampanga
7.	University of the Philippines Los Baños	College, Laguna
8.	Bureau of Animal Industry	Diliman, Quezon City
9.	Camarines Sur State College of Agriculture	Pili, Camarines Sur
10.	West Visayas State College	Lambunao, Iloilo
11.	Visayas State College of Agriculture	Baybay, Leyte
12.	Central Mindanao State University	Musuan, Bukidnon
13.	University of Southern Mindanao	Kabacan, North Cotabato

The FSP in the Philippines

The Forage for Smallholders Project (FSP) began in 1995. It is guided by the overall objective of the project, that is, to increase the availability of adopted forages and the capacity to deliver them to different farming systems, particularly upland farming systems. In the Philippines, the FSP is coordinated by PCARRD which is part of the Department of Science and Technology. The project has a large number of government and non-government collaborators (Table 2).

Agency	Focal person	Project site	Farming system	On-going activities	
Department of Agriculture	V. Pardinez / S. Darang C. Cabaccan / R. Pascua	Gamu, Isabela	Upland Upland	On-station trials On-station trials	
, grioditaro	R. Jamola / A. Cosep	Aglipay, Quirino Argao, Cebu	Upland	On-station trials	
	A. Castillo	Camalig, Albay	Coconut plantation	On-farm trials	
FARMI, Visayas State College of Agriculture	E. Balbarino / A.Obusa	Matalom, Leyte	Upland	On-farm trials	
Mag-uugmad Foundation Inc. (NGO)	T. Llena / L. Moneva	Guba, Cebu	Upland	On-farm trials	
Local government unit	P. Asis W. Nacalaban	Cagayan de Oro City Malitbog, Bukidnon	Upland Upland	On-farm trials On-farm trials	
Philippine Coconut Authority	J. Mantiquilla / C. Albacite	Davao City	Coconut plantation	On-station/ On- farm trials	
Philippine Carabao Centre at University of	C.P. Subsuban / O. Arganas	Aroman, Carina, North Cotabato	Upland	On-farm trials	
Southern Mindanao	-	M'lang, North Cotabato	Rainfed lowland	On-farm trials	

Table 2.	FSP co	ollaborators	in the	Philippines.
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While the regional performance trials (RPT) are conducted on-station, the FSP works with farmers to evaluate forages on farms. At FSP sites, various activities were carried out: Regional evaluation, seed production, farmer evaluation of forages,

multiplication of forages, training courses in participatory diagnosis (for technicians and farmers), planning and evaluation of forages, forage agronomy, and seed production (Table 3).

As part of the staff development program of FSP, 15 local staff (mostly present and prospective collaborators) were trained on Forage Agronomy at IRRI, Los Baños, Laguna from 4-15 August 1997.

Activity	Sites								
Activity	Isabela	Quirino	Albay	Leyte	Cebu	CDO	Bukidnon	Davao	USM
Regional evaluation	~	~	~	~	~	~	-	~	~
Participatory diagnosis	-	-	-	~	-	~	✓	~	~
On-farm evaluation	-	-		~	~	~	✓	~	~
Participatory evaluation	-	-	-	~	-	~	✓	-	-
Multiplication of forages	~	~	~	~	~	~	✓	~	~
Seed production	~	~	-	-	~	-	-	-	-
Training of technicians	~	~	-	~	~	~	~	~	~
Training of farmers	~	~	-	~	~	~	~	~	~

Table 3. Activities being carried out at FSP sites

Continued collaboration with the FSP – a must for the Philippines

Access to germplasm

This is a vital area where FSP can help national R & D programs. With the continued program of the Centro Internacional de Agricultural Tropical (CIAT) and with appropriate funding from AusAID, continued access to forage germplasm is assured. The existing program on RPT on forages can be accelerated if FSP can provide new germplasm to the trials.

Staff development

These is a dearth of available manpower, especially for on-farm R & D, FSP should therefore provide short-term courses and study tours and support attendance to regional and international scientific conferences. The cost can be appropriately divided between FSP and the host country.

Access to information

Information is vital to R & D work. FSP can initiate establishment of facilities to enhance information exchange and access to information technology. The host country shall shoulder the maintenance cost once facilities have been established.

New approach to technology development and delivery

Participatory approach to R & D is relatively new in the Philippines but this approach is well suited to the Filipino culture. FSP can provide the necessary training for local staff to strengthen their capability to use this new methodology.