Department of Environment and Natural Resources Ecosystems Research and Development Bureau

Status, Opportunities and Challenges in Implementing the Quality Planting Materials (QPMs) Project of the National Greening Program and its Expansion

Rationale

- Some 2 billion hectares of degraded forestlands worldwide (GPFLR, WRI, SDSU and IUCN 2011), about 270 million hectares in Asia (ITTO 2002) and around 7 million hectares in the Philippines (EO 193) are providing opportunities for restoration.
- Such trend and magnitude calls worldwide attention. Examples of restoration efforts are the ff:
 - 150 million hectares globally by 2020 as per Bonn Challenge in Germany (FAO/RECOFTC 2016)
 - 20 million hectares by 2020 in Asia-Pacific Region (APEC 2015)
 - 7.1 million hectares in the Philippines (EO 193)





Challenges

- Pulhin *et al.* (2006) stressed the need of high quality planting materials to ensure success of forest restoration effort.
- As such, the ERDB-DENR established 75 Seed Sources (SPAs and IPTs) and constructed 50 clonal nursery facilities (22 for DENR and 28 for partnered SUCs) to produce Quality Planting Materials (QPMs) in support of the NGP (EO 26) and its expansion (EO 193) based on section 8.7 of the DENR Memorandum Circular No. 2011-01.
- This presentation summarizes the status, opportunities and challenges



A. Seed Sources (SPAs and IPTs)

Table 1. Regional Established SPAs and IPTs, 2018

- Established 75 Seed Sources
- Collected nearly 6 million seeds nationwide in 2018
- Seeds were processed and stored at 6 Forest Tree Seed Centers of the country



Region	Seed Sources		Seeds Collected from Jan to Sep	No. of Species	
	SPA	IPT	2018 (x100,000)		
CAR	1	5	4.03	8	
1		4	1.14	8	
2	1	4	9.61	10	
3	7	-	5.99	6	
4A	-	5	0.25	12	
4B	1	4	1.38	5	
5	4	2	1.96	7	
6	2	4	4.89	8	
7	3	1	6.41	4	
8	4	2	0.14	5	
9	3	-	0.61	3	
10	-	5	1.49	mixed species	
11	-	4	10.61	mixed species	
12	2	2	0.80	6	
13	3	2	10.43	6	
Grand Total	31	44	59.76		

B. Clonal Nursery Facilities

- Constructed a total of 50 clonal nursery facilities (DENR managed – 22; partnered SUCs – 28)
- In 2018, sixteen (16) out of 22 nurseries have been turned-over to Regional Offices
- While the remaining 6 facilities are being managed by the ERDB





- Produced a total of some 83 Million QPMs, wherein about:
- 5 Million (clones)
- 8 Million (Wildlings)
- 40 Million (seeds)
- 30 Million (unspecified)



C. QPMs Production

Table 2. QPMs Produced from 2011 to 2017 (million seedlings)

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	QPM Production						Total QPM	
Region	2011	2012	2013	2014	2015	2016	2017	Produced (2011-2017)
CAR	1.62	1.43	2.26	0.56	0.08	0.20	0.07	6.22
1	1.00	1.34	1.74		0.12	0.11	0.08	4.39
2	1.75	1.29	1.86	0.81	0.36	0.27	0.07	6.41
3	1.13	1.17	1.93		0.16	0.19	0.13	4.71
NCR	0.25	0.07	0.08	0.02	0.02	0.02	0.03	0.49
4A	2.17	1.22			0.12	0.14	0.06	3.71
4B	1.39	1.12	1.71		0.04	0.05	0.03	4.34
5	1.00	1.15	1.68	1.15	0.08	0.14	0.05	5.25
6	1.10	1.19	2.17		0.19	0.36	0.24	5.25
7	1.24	1.22	1.62	1.27	0.17	0.14	0.07	5.73
8	1.50	1.18	1.88	0.28	0.08	0.17	0.10	5.19
9	1.05	1.09		0.51	0.10	0.08	0.02	2.85
10	1.50	1.15		0.50	0.20	0.09	0.04	3.48
11	2.00	1.52	3.02	2.07	0.25	0.17	0.07	9.10
12	1.09	1.33	1.70	1.25	0.45	0.21	0.05	6.08
13	1.65	1.55	2.52	1.16	0.26	0.19	0.08	7.41
ERDB MO	0.82	1.07		0.55	0.17	0.17	0.03	2.81
GRAND TOTAL	22.26	20.09	24.17	10.13	2.85	2.70	1.22	83.42

- Outplanted a total of 4,059,420 cloned planting materials nationwide



D. QPMs Outplanted

Table 3. QPMs Planted Nationwide from 2015 to 2017

Region	No. of Hectares Planted	No. of QPMs Planted (x1000)
CAR	456	229.46
1	503	251.70
2	112.95	56.48
3	470	241.76
NCR	117.5	59.19
CALABARZON	499.9	250.40
MIMAROPA	60	30.00
5	383	151.50
6	1326	509.45
7	646.62	274.75
8	500	252.00
9	114.9	57.45
10	400	289.79
11	745	402.51
12	1060	534.00
13	930	469.00
Grand Total	8324.87	4059.42

- Produced a total of 3,777.97 tons of Hi-Q Vam 1
- Distributed some 1,246 tons nationwide

E. Hi-Q Vam 1 Distributed

Table 4. Hi-Q Vam 1 Distributed Nationwide

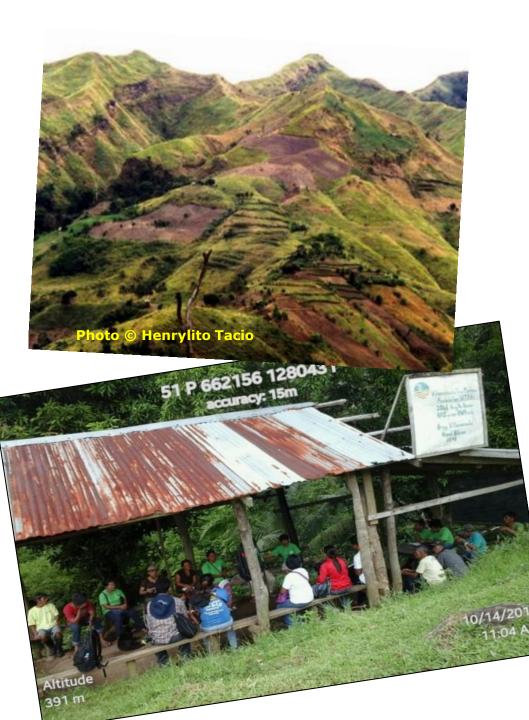
Year	Hi-Q Vam 1 Distributed (tons)
2012 ^a	-
2013 ^b	-
2014	228.42
2015	235.35
2016	239.35
2017	249.62
2018	293.97
Total	1,246.71

a & b- Construction of Hi-Q Vam 1 Facilities



Opportunities

- Identified some 7.1 million hectares of degraded forestland that offers opportunities for restoration
- Involvement of the community, particularly in the identification of preferred indigenous forest tree species to be produced



Challenges (Issues and Concerns)

- Appropriate silvicultural intervention to established SPAs and IPTs
- Change/movement of trained focal person
- Choice of Species
- Continuous Participation of the partnered SUCs in the Production of QPMs



Next Step

- Revisiting the existing policy and guidelines (i.e. DAO-2010-11)
- Intervention of the ERDB-DENR to balance the choice of species of the community and POs to address not only the socio-economic, but the environmental aspect of the program
- Leveling-off with the field Offices to address the issue of frequent changes and movements of trained focal personnel.
- Continuous monitoring and provisions of necessary technical assistance in the management of SS and turned-over clonal nurseries
- Creation of composite team (ERDB and FMB) to conduct Monitoring and Evaluation of SS and clonal nurseries



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DENR ADMINISTRATIVE ORDER No. 2010 - 11

> SUBJECT: REVISED REGULATIONS GOVERNING FOREST TREE SEED AND SEEDLING PRODUCTION, COLLECTION AND DISPOSITION



