

The National Greening Program: Hope for our balding forests

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Introduction

On February 24, 2011, Executive Order (EO) 26 was issued declaring the conduct of the National Greening Program (NGP). The NGP is a priority program of the government that is aimed at reducing poverty; promoting food security, environmental stability, and biodiversity conservation; and enhancing climate change mitigation and adaptation. It is, therefore, not a straightforward reforestation effort but a larger program intended to attain other important national objectives as well.

The NGP specifically seeks to plant 1.5 billion seedlings in 1.5 million hectares of land nationwide within six years, from 2011 to 2016. The target in hectareage to be reforested is more than double the target in the *Philippine Development Plan 2011–2016* of 600,000 hectares of increased forest

cover by 2016 (NEDA 2011). The NGP has an estimated total budget of PHP 30 billion.

This *Policy Note* briefly reviews the performance so far of the NGP at the national and regional levels based on available data and information from the Department of Environment and Natural Resources (DENR) and Commission on Audit (COA) as well as a recent study conducted by PIDS (Israel and Lintag 2013). Furthermore, it discusses the newly commenced NGP impact assessment project being conducted by PIDS and other program-related developments. The end purpose of this *Note* is to provide interested parties with a general update of the progress of the NGP

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and recommend some actions that can be undertaken for its more effective implementation.

Performance of the NGP

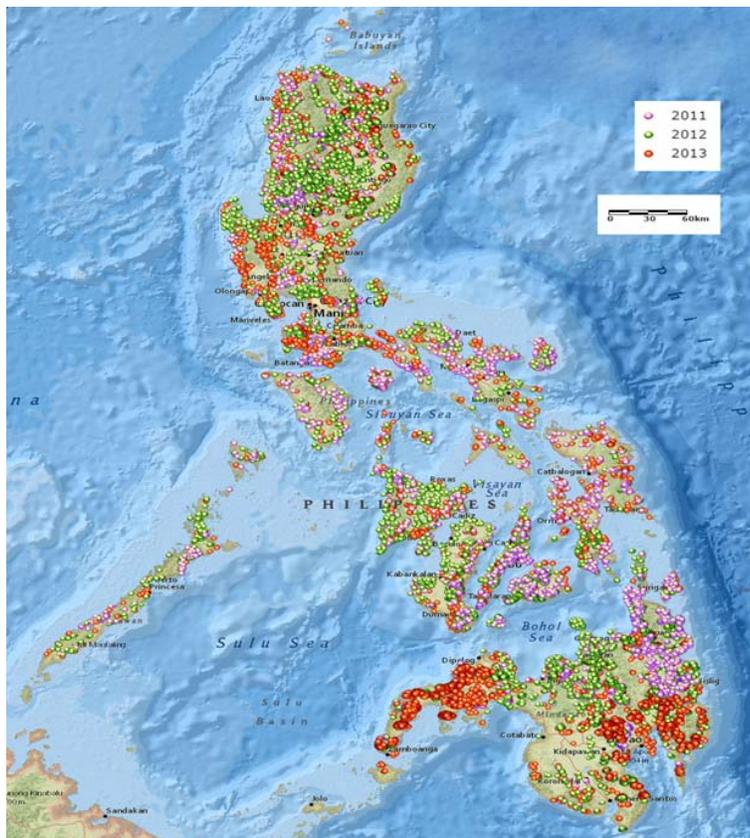
Planting sites

Since the NGP started in 2011 up to 2013, numerous planting sites have already been established around the country under NGP-DENR (Figure 1). Mindanao had the largest number with 29,900 sites (51%) followed by Luzon with 20,466 sites (35%) and Visayas

with 8,325 sites (14%) for a total of 58,691 in three years. The number of sites has been increasing with 13,661 sites (23%) established in 2011 followed by 20,968 sites (36%) put up in 2012 and 24,062 sites (41%) established in 2013.

Regionally, the distribution of NGP planting sites significantly varied over time. From 2011 to 2013 (Table 1), Zamboanga Peninsula (Region IX) had the most number of planting sites followed by the Cagayan Valley (Region II) and Caraga Region (Region XIII), respectively. On the other hand, National Capital Region (NCR) had the least number followed by the SOCCSKSARGEN (Region XII) and Bicol Region (Region V), respectively. During the entire period, all the regions and provinces of the country have already been covered by the NGP.

Figure 1. Planting sites of the National Greening Program, 2011–2013



Source: ArcGIS Webmap, DENR <http://www.arcgis.com/home/webmap/viewer.html?webmap=1bf60978b5374df88f52250c14a2fb85>

Hectarage planted

The NGP targeted to plant 100,000 hectares in 2011, 200,000 hectares in 2012, and 300,000 hectares in 2013 nationally (Figure 2). It further aimed to plant 300,000 hectares yearly from 2014 to 2016. Data reported by the DENR showed that from 2011 to 2013, the annual targeted areas planted have been exceeded by actual areas planted. Specifically, the target was exceeded by 28,558 hectares in 2011, 21,763 hectares in 2012, and 33,160 hectares in 2013. For the entire period, the target has been exceeded by 83,481 hectares (14%). Thus, based on areas planted as reported, the NGP has performed

more than adequately nationally during the first three years of implementation. In light of the encouraging figures, it has been mentioned that the target for 2014 may be increased from 300,000 hectares to 400,000 hectares (Quintos-Natividad 2014).

The NGP targets varied significantly across regions. In 2013, for instance, Regions VII, IV-A, and V had the highest targets exceeding 20,000 hectares each (Figure 3). Meanwhile, NCR and ARMM had the lowest targets of 880 hectares and 2,039 hectares, respectively. Data also showed that in 2013, the regional annual targeted areas planted have been exceeded in many regions, including CAR, I, II, IV-A, IV-B, VI, VII, IX, XI, XII, and XIII, while they were sufficiently met in Regions V and X. However, the targets were not attained albeit by close margins in Regions III and ARMM, and not attained by a large deficit in Region VIII. Thus, based on areas planted, the NGP has performed more than adequately in many regions during the first three years of implementation.

Seedlings planted

Nationally, the NGP targeted to plant 100 million seedlings in 2011, 200 million seedlings in 2012, and 300 million seedlings in 2013 (Figure 4). It further planned to plant 300 million seedlings annually from 2014 to 2016.

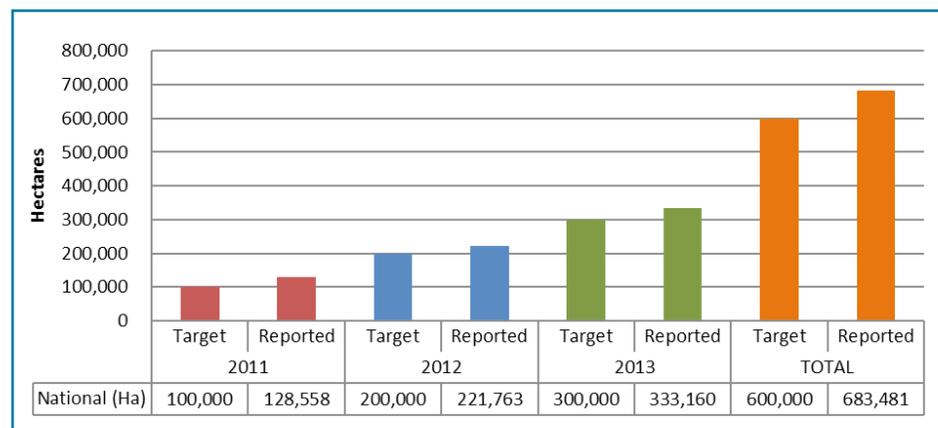
Table 1. Number of planting sites of the National Greening Program by region, 2011–2013

Region	2011	2012	2013	Total
NCR	187	236	172	595
CAR	2,095	2,046	2,175	6,316
Region I	148	355	337	840
Region II	1,521	2,772	3,978	8,271
Region III	394	626	581	1,601
Region IV-A	368	360	300	1,028
Region IV-B	419	344	239	1,002
Region V	351	301	161	813
Region VI	305	723	454	1,482
Region VII	908	2,442	2,588	5,938
Region VIII	306	261	338	905
Region IX	2,309	3,023	4,640	9,972
Region X	1,340	2,281	3,088	6,709
Region XI	1,223	1,901	2,531	5,655
Region XII	102	284	422	808
Region XIII	1,685	3,013	2,058	6,756
ARMM*	-	-	-	-
Total	13,661	20,968	24,062	58,691

* ARMM is excluded because it is not listed under NGP-DENR but under "other partners" of NGP.

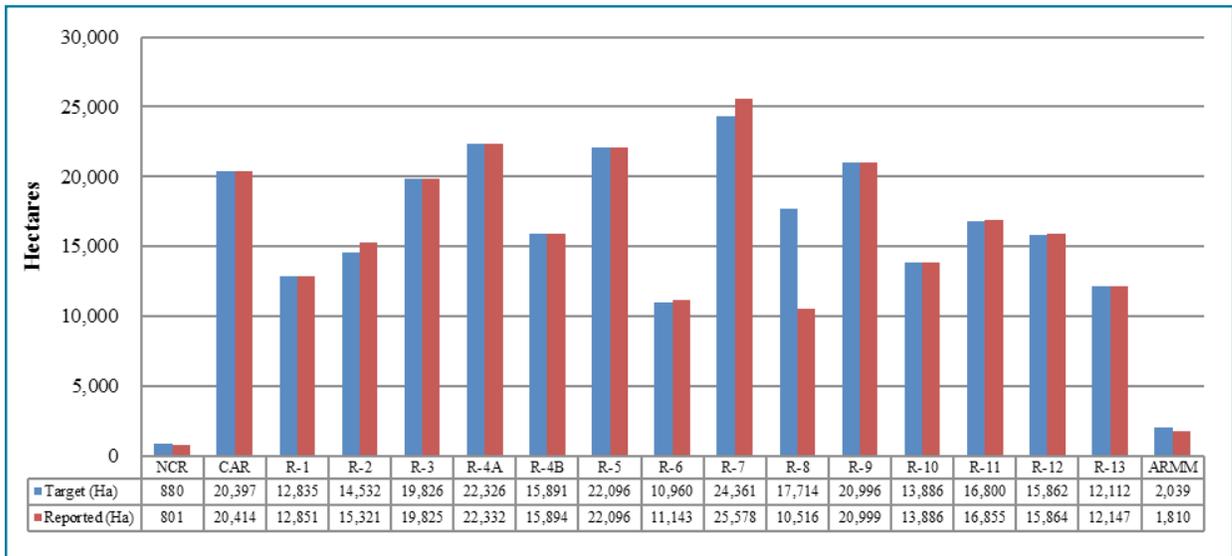
Source of data: NGP-DENR

Figure 2. National targets and reported areas planted by the National Greening Program, 2011–2013 (hectares)



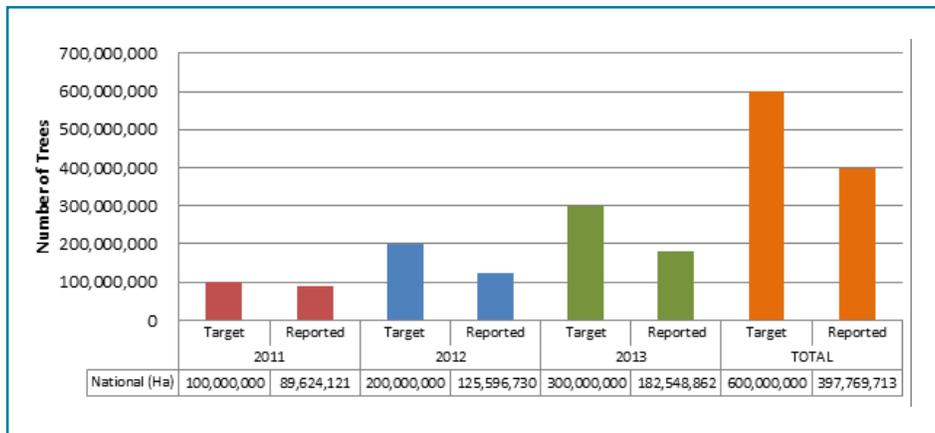
Source of data: NGP-DENR

Figure 3. Areas planted by the National Greening Program by region, 2013



Note: All regions were under DENR-NGP except ARMM which is listed among "other partners".
Source of data: NGP-DENR

Figure 4. National targets and seedlings planted by the National Greening Program, 2011-2013



Source of data: NGP-DENR

Based on this and data on area planted, the planting rate is on average 1,000 seedlings per hectare. Data reported showed that from 2011 to 2013, the annual targeted seedlings planted have not been achieved. Specifically, the target was missed by 10,378,879 seedlings in 2011, 74,403,270 seedlings in

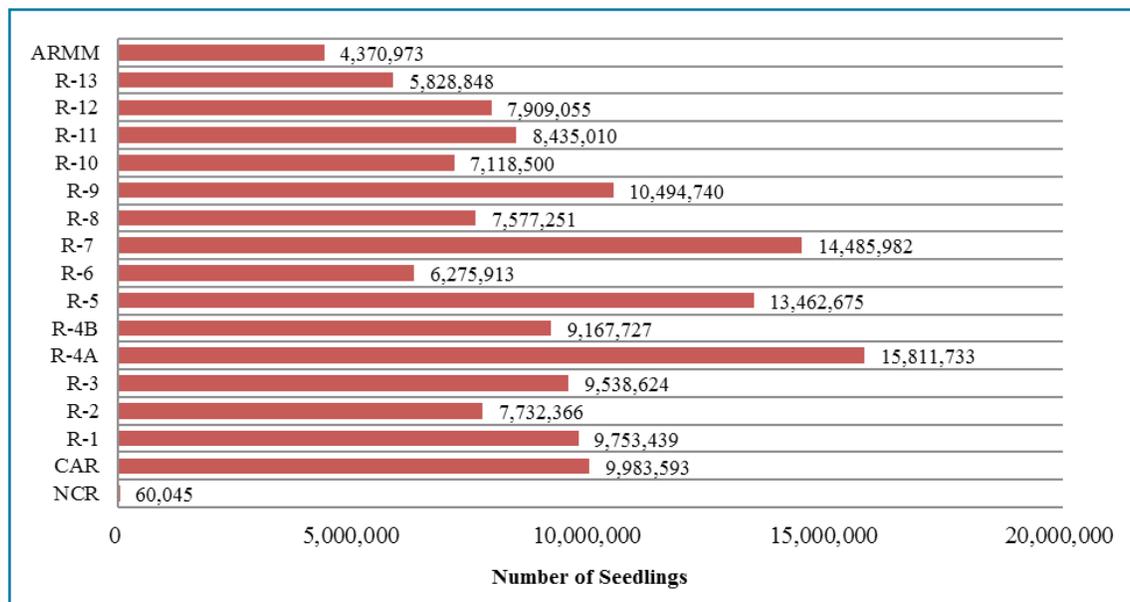
2012, and 117,451,138 seedlings in 2013, indicating that the deficit in seedlings planted has been increasing during the period. Hence, based on reported seedlings planted and compared with data on areas planted, the NGP has performed less than adequately at the national level during the first three years of implementation. There are no reported data on the NGP targets in seedlings planted per region. Available

data showed that in 2013, more seedlings were planted in Regions IV-A, VII, and V (Figure 5).

Employment

Based on reported data, the NGP provided 1,182,764 jobs to various program

Figure 5. Seedlings planted by the National Greening Program by region, 2013



Source of data: NGP-DENR

participants (including members of people's organizations, extension officers, and laborers) during the first three years of implementation. Furthermore, it involved 1,574,741 volunteer planters (including members of people's organizations, students, national and local government workers, members of the private sector, and other stakeholders). There is no information, however, on whether this labor participation is full time or part time as well as on other details that could provide a better picture of the employment contribution of the NGP.

Report limitations

While the aforementioned reported data on the current performance of the NGP are encouraging, they are inadequate for a more detailed analysis of the program. At the

least, additional data on survival rates and other important technical parameters would be needed to sufficiently assess performance. Overall, complete economic, social, environmental, institutional, and other relevant data and information that determine whether or not the program is on its way to attaining its stated objectives to reduce poverty, promote food security, environmental stability, and biodiversity conservation, and enhance climate change mitigation and adaptation are needed.

Past analysis of the NGP

There is limited analysis of the NGP so far. COA (2013) mentioned that the monitoring of NGP activities by the DENR in 2012 in general was centered on the number of hectares and seedlings planted. It further

said that no inspections were conducted to check the status of the planted seedlings. As a result, the needed remedial actions like replanting and proper care and maintenance were not undertaken so as to achieve the desired survival rate of 85 percent. The reason put forward by the report for the absence of monitoring of the condition of the planted seedlings was lack of personnel.

The COA report also mentioned that a monitoring and evaluation activity undertaken in early 2013 using a sample of the seedlings planted in 2012 showed only a 61-percent survival rate. This performance was below the desired survival rate of 85 percent. COA recommended that NGP should designate personnel, even on an ad hoc basis, to undertake inspection of the NGP sites to ensure that remedial actions are undertaken and the desired survival rate is attained.

A PIDS study conducted to do a preliminary evaluation of the NGP (Israel and Lintag

2013) found that the program was viewed by participants on the ground as performing positively in some areas. Specifically, it was perceived to have actually raised the incomes and livelihood opportunities of the program participants. In addition, it was seen to have contributed to the improved environmental conditions in the planting sites. Despite these positive perceptions, however, the NGP was viewed as only partially effective and efficient in its implementation. The participants asserted that an important problem in the initial implementation was the delay in the availability of the mobilization fund and limited personnel.

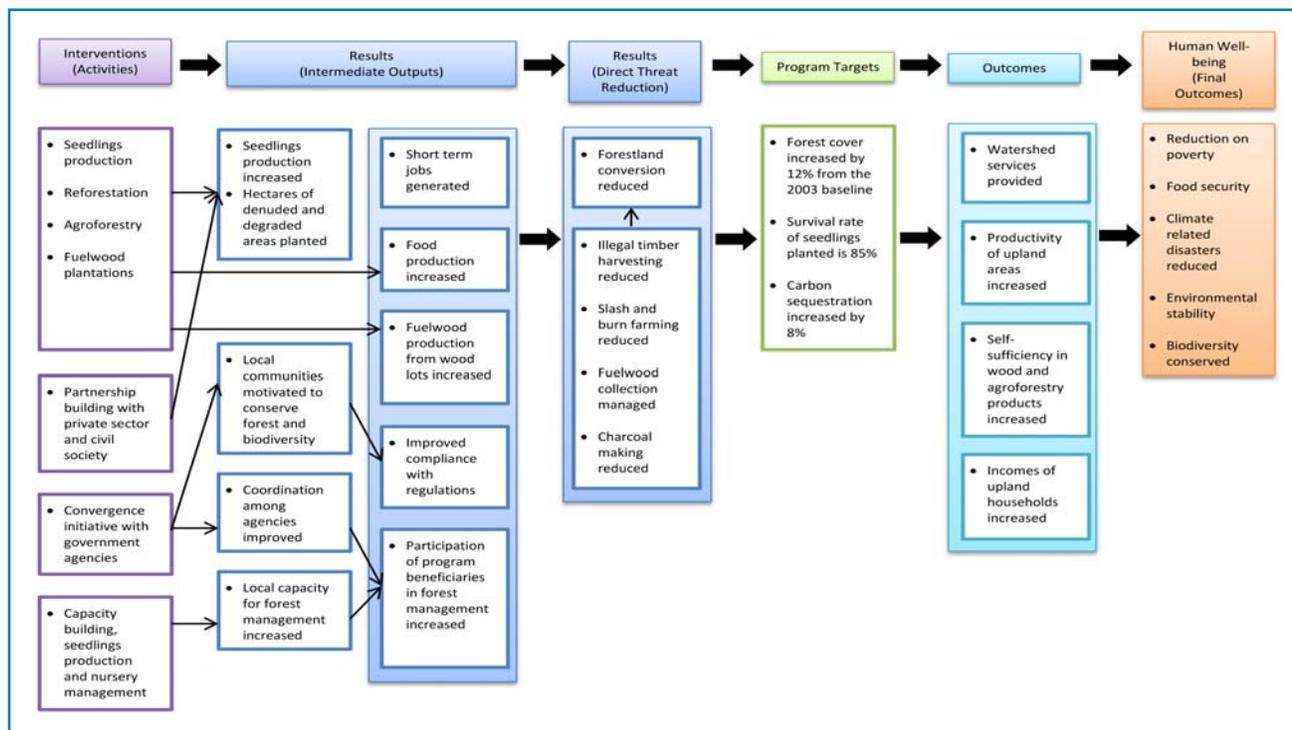
The study concluded that much of the success of the NGP in particular and future reforestation programs of the country in general would depend on complex and sometimes intertwining factors. Other than the infusion of sufficient financial and manpower resources, a reforestation program would have a better chance of attaining its objectives if its implementers can sufficiently monitor and evaluate its activities and effectively implement solutions to address the problems encountered.

Impact assessment of the NGP

To fully assess the NGP, the national government recently commissioned PIDS to conduct an impact assessment of the program. This impact assessment is intended to find ways to improve decisions and

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Figure 6. Framework for the impact assessment of the National Greening Program



Source: PIDS

implementation mechanisms so that the NGP's performance will have significant gains in the end and for succeeding forestation programs to learn from it.

The framework for the impact assessment of the NGP is illustrated above (Figure 6). It is based on the theory of change that sets out a plausible logical sequence of inputs, activities, and outputs for which the NGP is directly responsible for and has control over. These variables interact with behavior to establish pathways through which outcomes and impacts are achieved. To refine the framework, it will be discussed further among NGP partners and implementers as the need arises and then validated and

revalidated. The impact assessment has four main components: economic, social, environmental, and institutional. The conduct of the impact assessment project commenced in late fourth quarter of 2014 and has an expected duration of one year.

In addition to the impact assessment project, improvements have been done in the conduct of the NGP since it started. In the area of monitoring specifically, the DENR in 2013 started to implement a 100-percent real-time monitoring system for the NGP (Nicer 2014). This new monitoring system is intended to safeguard government assets and NGP expenditures, check the accuracy of NGP accounting data and reports, and

ensure compliance with NGP-related laws, rules, and management directives. Among others, it should enhance the NGP by way of improving accountability, data accuracy, and rule compliance.

Recommendations and conclusion

In the interim, some actions can be done to improve the conduct of the NGP. Firstly, the program should raise its replanting rate performance at the national, regional, and site levels. A contributing effort for this is to increase the availability and distribution of the appropriate seedlings to be planted. Secondly, it would help if the management team of the NGP can already report the survival rates of the planted seedlings at all levels. Thirdly, it would also be useful to report the replanting activities and other remedial measures that have been undertaken to address the low survival rates. Finally, a complete report on the expenditure side of the implementation of the NGP and consequent audit at all levels is necessary not only in determining the efficiency of the program but also in promoting transparency.

The impact assessment of the NGP being conducted by PIDS should provide further recommendations for the implementation of the program in its closing years and the conduct of future reforestation programs. There is certainly still a long way to go before the medium and long-term net benefits of the NGP are known with finality. Notwithstanding this, the NGP has provided some measure of hope for the recovery of our already balding forests, an objective that previous national reforestation programs have miserably failed to achieve.



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