

An Analysis of Presidential Instruction No. 10, 2011

Moratorium on Granting of New Licenses and Improvement of Natural Primary Forest and Peatland Governance

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Introduction

The Presidential Instruction No. 10/2011 limiting the issuance of licenses for conversion of forest or development of peat is one key deliverable forming part of a bilateral agreement outlined in the Letter of Intent (LoI) between the Government of the Republic of Indonesia (GoI) and the Government of the Kingdom of Norway on “Cooperation on reducing greenhouse gas emissions from deforestation and forest degradation”¹. The LoI directly supports GoI’s own voluntary targets of achieving 26% greenhouse gas (GHG) emissions reduction by 2020 coupled with 7% economic growth (often referred to as the ‘7/26 objectives’ for low emissions development).

The Presidential Instruction (PI) forms two parts: (i) main text describing actions to be taken by GoI, and (ii) an indicative map of the areas over which such actions will be applied (the Map). This document is an analysis of the PI, covering content of the text, the Map, and key implications for the PI as a tool to assist Indonesia in progress toward achieving the 7/26 objectives.

Purpose of the Moratorium

A ‘two year suspension on all new concessions for conversion of peat and natural forest’¹ is potentially a powerful instrument to achieve the 7/26 objectives outlined by GoI. The moratorium is not intended to prevent all exploitation of peatlands and natural forest from this point forward, but rather to provide ‘breathing space’ for GoI to evaluate and re-tool the economic development and forest management planning process to place the economy on a more sustainable footing. This break would provide GoI time to acquire necessary data and create mechanisms to coordinate among numerous Ministries and agencies to develop detailed, coherent plans for development, whilst preventing readily avoided irreversible activities from taking place during that period.

¹ Taken from the text of the LoI between the Government of the Kingdom of Norway and the Government of the Republic of Indonesia

General Scope of the Text

The PI covers a moratorium on new licences for a period of two years and other instructions aimed at reducing GHG emissions. The moratorium on new licences and associated instructions are restricted to areas described in the Map, whether licences fall within legally defined 'Forest Lands' or 'Non-Forest Lands'. The sectoral scope for new licences covered by the moratorium includes forestry licenses, as well as other sectors where permits are required for companies or individuals to operate on state lands (such as Oil Palm estates), with the exception of mining, which is not explicitly covered, and other strategic industries (discussed further below). The PI also suspends the issuance of letters of recommendation by Governors and Regents/Mayors for new licenses on areas covered by the Map, which affects any form of land utilisation in any sector where such recommendations are required (including mining).

The Indicative Map

The Map depicting areas covered by the Moratorium is labelled 'Indicative' by Gol, with intentions for it to be updated every six months. The Map defines areas within which specified actions are suspended, and other actions are required. As such, it is therefore a cornerstone for implementation of the PI over the next six months, unless or until it is revised sooner. Here, we describe the Map.

In its legend, the Map is said to depict:

- (i) Primary forest within production forest lands (Hutan Produksi), protection forest lands (Hutan Lindung), conservation forest lands (Kawasan Konservasi), and lands for other uses (Non-Forest lands, referred to as APL); and
- (ii) Peat lands.

The attributed sources for these two layers and associated data are: (i) Ministry of Forestry (MoF) thematic forestry maps; (ii) a MoF interpretation of Landsat imagery (2009); (iii) a map of peat lands from the National Development Planning Agency (Bappenas; adopted from Wetlands International series of Peatland Distribution Maps for Sumatra, Kalimantan, and Papua²); (iv) MoF licensing maps; and (v) MoF maps of legally defined Forest Lands.

No transparent explanation of how the map was produced is provided in the PI, but insights into how it was constructed, and thus how it complies with text of the PI (and terms of the Lol), can be obtained by comparing the Map to other public domain data sources³.

² http://www.wetlands.or.id/publications_books.php

³ Susan Minnemeyer, Lauriane Boisrobert, Fred Stolle, Y. I. Ketut Deddy Muliastira, Matthew Hansen, Belinda Arunarwati, Gitri Prawijiwuri, Judin Purwanto, and Rakhmat Awaliyan. 2009. Interactive Atlas of Indonesia's Forests (CD-ROM). World Resources Institute: Washington, DC

Primary Forest

Areas in the Map referred to as ‘primary forest’ (a term not defined in the PI, but defined by MoF as forests that have never been logged) appear to have been mapped as:

- (i) Primary forest mapped by MoF from 2009 Landsat imagery
- (ii) Minus areas where licences have been issued by the MoF (and thus not considered as ‘new’ for purposes of the Moratorium)
- (iii) Plus some but not all Conservation Areas⁴ (Kawasan Konservasi) and Protected Forests (Hutan Lindung).

The MoF interpretation of 2009 Landsat imagery is not public domain. However, as a first approximation of the maximum extent of primary forest it delineates, the public domain 2003 Landsat interpretation by MoF⁵ shows c.49 M ha as primary forest (2009 extent will be less, of course, as a result of deforestation/degradation post-2003). Of this c.49 M ha, c.25 M ha is already excluded from conversion as it falls within boundaries of protected forest, and an additional as yet unknown amount has been excluded for areas where licenses had already been granted.

The Lol, which serves as the proximal motivation for the PI, uses the term ‘natural forest’ in reference to areas intended to be covered by the moratorium. Within the PI, Gol has elected to interpret ‘natural forest’ as forest that has never been logged or damaged by humans. This narrow Gol definition of natural forest is roughly equivalent to *undisturbed primary forest* in the common nomenclature used by the wider public, and as such may not conform to expectations of all parties concerning the Lol. An ecologist, for example, might argue that a logged or partially degraded forest dominated by native species could be termed ‘natural’ so long as the ecological function and processes typical of unlogged forest are maintained after logging, albeit it in altered form. Such a condition describes what MoF would classify as *secondary forest*, and these areas have been excluded from the PI and the Map. Exclusion of such *secondary forest* has implications for the PI to assist Gol in meeting the 7/26 objectives, as published studies have shown that aboveground carbon stocks of logged forest typically retain c.50% of the aboveground biomass compared to unlogged primary forests⁶, with potential emissions from conversion of up to c.100 Mt C per ha. Future conversion of logged forest will therefore continue to be a major source of emissions for Indonesia.

⁴ For example, the northern section of the Kerinci Seblat National Park, among others, is excluded even though it contains primary rainforest as per the MoF definition.

⁵ Susan Minnemeyer, Lauriane Boisrobert, Fred Stolle, Y. I. Ketut Deddy Muliastira, Matthew Hansen, Belinda Arunarwati, Gitri Prawijiwuri, Judin Purwanto, and Rakhmat Awaliyan. 2009. Interactive Atlas of Indonesia's Forests (CD-ROM). World Resources Institute: Washington, DC

⁶ Berry, NJ; Phillips, OL; Lewis, SL; Hill, JK; Edwards, DP; Tawatao, NB; Ahmad, N; Magintan, D; Khen, CV; Maryati, M; Ong, RC; Hamer, KC The high value of logged tropical forests: lessons from northern Borneo BIODIVERS CONSERV, 19, 985-997, 2010

The potential extent of 'natural forest' in Indonesia from the view point of an ecologist using closed canopy forest as a proxy may be as large as 94⁷-117⁸ M ha, 35-68 M ha greater than the areas MoF defined as primary forest in 2003. This figure is closer to, but still more than, the 64 M ha of 'primary forest' cited recently by the REDD+ Taskforce⁹. Though one cannot yet give precise figures of 'primary forest' covered by the Moratorium, it seems clear at this stage that the total area of forest covered is far less than the total area that is not.

Peatlands

Peatlands are not explicitly defined in text of the PI or the Map, nor are summary statistics provided on peat extent covered by the moratorium. Direct comparison with Wetlands International (WI) peat maps, however, shows that areas mapped as peatlands in the Map are those which, according to WI, support peat soils >50cm deep, minus areas (i) already delineated as 'primary forest' on the Map (see above), and (ii) where licences have already been issued by MoF.

According to WI, the extent of peatlands >50cm deep across Indonesia covers c.22 M ha. Of this, 7 M ha was mapped as primary forest by MoF in 2003. The portion of such areas considered by MoF still to support primary forest in 2009 will have been mapped as primary forest in the Map, leaving at least 15 M ha potentially depicted as peat (minus areas covered by licenses that have been exempted). It should be noted, however, that the WI peat maps do not include peatlands in Sulawesi or other localised areas of peat on islands in other parts of Indonesia, so that peatlands depicted in the Map should be seen as a conservative estimate of their full extent at a national level.

Based on multiple data sources, the REDD+ Taskforce itself has estimated the maximum potential extent of peatlands in Indonesia to be c.31 M ha⁹, including all shallow/superficial peatlands whose cautionary management would be required to maintain water tables within upslope, deeper interior peats.

Total Extent Covered by the Moratorium

Using best available data, and applying logic consistent with the First Dictum of the PI, the total area covered by the moratorium Map should be approximated as:

- (i) Up to 64 M ha, representing the sum of 49 M ha of primary forest mapped by MoF in 2003 plus the balance (15 M ha) of peatlands mapped by WI and that did not support primary forest in 2003 (based on MoF data),
- (ii) Minus areas of non-peat primary forest lost between 2003-2009.

⁷ Adapted from data from the Centre of Remote Imaging, Sensing and Processing, Singapore. Miettinen, J., Shi C., Tan W.J. and Liew S.C. 2011. 2010 land cover map of insular Southeast Asia in 250m spatial resolution. Remote Sensing Letters 3: 11-20.

⁸ Adapted from data from a classification by SarVision using 2008 SPOT Veg imagery.

⁹ Media release by REDD+ Taskforce 20th May 2011.

However, as released, the Map does not conform to this logic, and total extent thus cannot be estimated reliably from available public domain data sets, since an arbitrary portion of official conservation areas and protected forests appear to have been excluded, and an unspecified number (and area) of existing forestry concession areas have also been excluded. Bearing in mind the title of the Map as 'Indicative' with intention for it to be revised after six months, such inconsistencies between the map and text of the PI would seem high priorities to be corrected.

The PI also requires the National Survey and Mapping Coordinating Agency (Bakosurtanal) to coordinate the 6-monthly revision of the Indicative Map through cooperation with the Minister of Forestry, Head of National Land Agency, and Head of the REDD+ Taskforce or Head or any new institutions formed to implement REDD+. However, in the PI as written, MoF has been assigned primary responsibility for the Map within Forest Lands, and for enacting the overall revision.

The Presidential Instructions

Resolving Disagreement Between the Text and the Map

The Second Dictum of the PI states that the moratorium applies to primary natural forest and peat lands, without making explicit reference to the Map. However, in practice, the moratorium on issuance on new licences applies to all areas covered by the Map. This raises the question, what happens when there are discrepancies between the Map itself and areas the text of the PI mandates should be depicted in the Map? No instructions have been provided in the text to address this point.

Issuance of New Licenses by MoF

The MoF is instructed not to move forward with issuance of any new licences, excepting those which have already received 'approval in principle'. As of May 2010, there was c.25 M ha of logging concessions and c.12 M ha of fibre plantations¹⁰ that had filed applications to MoF or were already fully operational. The number of licences at the date of the PI is not yet known. But for fibre plantations one can assume that given MoF's commitment to their expansion, the number that had received 'principle approval' but were not yet fully licensed to operate was at least as large as that in 2010, namely c.3 M ha. Despite financial investment limited only to obtaining initial licences and possibly an Environmental Impact Assessment (EIA), these licenses will be allowed to proceed to an operational stage. In principle, this could entail clear cutting up to 80% of their land base and draining peat lands in order to plant fast wood species, or rubber.

In addition to the exemption of licences that have received 'approval in principle', those licences that are approaching expiration can also be extended, even if they occur on primary forest and/or peat lands as mapped (and would entail opening new areas). In this manner, a logging concession coming to the end of its term and possibly having nearly exhausted its harvestable timber could be extended and

¹⁰ Daftar IUPHHK sampai dengan bulan Mei 2010, MoF

then transformed into a timber plantation (which would entail forest conversion) or an ecosystem restoration project¹¹ exempted from the moratorium. Such an administrative reclassification appears not to be considered a new licence under terms of the PI. Furthermore, MoF regulations also allow the expansion of existing plantation forests under certain circumstances without having to make a ‘new’ application¹⁰. Though not specifically stated in the text, it appears that within areas covered by the Map, MoF will be suspended from releasing new areas of Forest Lands allocated for conversion purposes (HPK) under existing spatial plans, if such land release is part of a license considered ‘new’ or if it would require a letter of recommendation from the Governor or Regent (whose authority to do so has been restricted under the PI, see below)¹².

The MoF is also instructed to improve governance policies for land lease permits¹³ and timber production utilization permits in natural forest¹⁴ (for logging only, not other forms of permits such as industrial timber plantations), as well as increase the effectiveness of managing so-called critical lands (*lahan kritis*)¹⁵ by emphasizing good governance policies for management of forest and peatlands. It is not stated how this might be achieved or what the criteria for measuring success will be.

Similarly, Ministry for Environment (MoE), through issuance of environment licences (Ijin Lingkungan) as part of the EIA process, is instructed to improve the governance of forest and peatland utilisation to reduce GHG. However, moratorium areas shown in the Map currently excludes all MoF licences and applications with ‘approval in principle’, whether or not EIA has already been performed. This highlights a missed opportunity to identify and capitalize upon opportunities for tightening regulations in the EIA, indicating MoE will encounter difficulties delivering on its obligations under the PI.

Regional Government

Instructions are given to all Governors and Regents/Mayors to suspend further issuance of licences¹⁶ on areas shown in the Map, as well as recommendations for any new proposed development in these areas. This, in effect, stops all new licensing procedures in moratorium areas of the Map, potentially including mining operations, where letters of recommendation are also required.

For forestry licences, recommendations from Governors and Regents/Mayors are not required for the extension of existing licences or, under certain circumstances, for: (i) expansion of areas covered by existing licences, or (ii) as noted above, the mutation of logging concession licences into forest plantation or ecosystem

¹¹ P.50/Menhut-II/2010

¹² PP 10/2010

¹³ These are areas of forest within Forest Lands granted for road construction, mining, and other purposes.

¹⁴ IUPHHK-HA

¹⁵ Critical lands (*lahan kritis*) is a technical term used by Ministry of Forestry that defines areas that describes land areas damaged such that they have lost or have a reduced functionality based on certain criteria.

¹⁶ A legal term (*izin lokasi*) which is the starting point to obtain a business or other land use right on state lands outside of forest lands.

restoration licences¹⁷. However, while ecosystem restoration licences are excluded from the moratorium, a completely new ecosystem restoration license would, in certain conditions, seem to be prevented by the PI, as it requires a Governor's letter of recommendation, which is now prohibited if the application covers areas on peat (likely) or primary forest (unlikely) included in the Map.

Legally Defined Non-forest Lands

As with Governors and Regents/Mayors, the Head of the National Land Agency responsible for issuing permits for land use rights on state lands defined as Non-Forest Lands is suspended from issuing land use right permits (*hak guna usaha* and *hak guna*) on areas shown on the Map. Such permits provide legal rights for companies to utilise state lands for agricultural purposes such as oil palm cultivation. Whilst only limited areas of primary forest exist in legally defined Non-Forest Lands, an estimated c.1 M ha of deep peat (>2m), and even larger areas of shallower peat, exists in Non-forest Lands. The suspension of issuing new licences on these peatlands is a useful addition to the current Ministry of Agriculture restriction on developing oil palm only on peatlands <3 m deep and that meet other criteria.¹⁸ However, any company operating in Non-Forest Lands and already holding a location license (Ijin Lokasi) is not restricted from obtaining a land clearance licence (Ijin Pembukaan Lahan) issued directly by a Governor or Regent in order to start clearance. This would seem to be an oversight in the PI, since during the two years covered by the moratorium, such plantations cannot obtain the security of long term business use rights permits (HGU) issued by BPN, but they could nevertheless fully develop their plantation, including clearance of primary forest and/or drainage of peatlands. It is widely believed that most area on Non-Forest Land in Sumatra and Kalimantan has already been issued location licenses for plantation development, especially oil palm, including on deep peat areas. However, only a portion of these areas would already hold land clearance permits. This highlights a missed opportunity for preventing emissions from peatland development since the PI does not place any direct or indirect restrictions on issuing land clearance licenses.

In the PI, the Head of National Spatial Planning Coordinating Agency is instructed to accelerate consolidation of the moratorium map with the revision of regional spatial plans as part of improving land use governance through cooperation with Governors, Regents/Mayors, and the Head of REDD+ Taskforce or Head of any new institutions formed to implement REDD+. When approved, the spatial plans of provinces and regencies determine the legally defined Forest Lands and Non-Forest Lands within their domain, as well as utilisation permitted within these areas. The vast majority of provincial and regency plans are still in the process of revision. This provides an opportunity for incorporating the Map into spatial plans, and to enlarge or reduce areas proposed for classification as Forest Lands in line with the 7/26 objectives (e.g. swapping low carbon/low biodiversity Forest Lands suitable for agriculture for high carbon/high biodiversity Non-Forest Land whose conversion would carry a large emissions footprint). This is a key opportunity to support low emissions development planning for provinces and regencies, to

¹⁷ P.50/Menhut-II/2010

¹⁸ 14/Permentan/PL.110/2/2009

protect peat lands from further development, and to ensure areas mapped as primary forest in the PI are accorded a more secure, long-term protection status. It must be emphasized, however, that changes to the extent or range of uses permitted within Forest Lands would be subject to MoF approval.

Since much of Indonesia's Forest Lands are not currently included in the Map, due to a variety of exemptions and other reasons not immediately clear, potential for the PI to support low carbon development planning at a national level has been greatly reduced. Targeting such planning at a sub-national level and within Non-Forest Lands would, therefore, seem to be a high priority.

Other Exceptions to the Moratorium

The PI makes an exception for licences relating to geothermal, oil and gas, electricity, land for rice and sugarcane. The exclusion of geothermal, oil, and gas are expected exclusions. All these industries are of strategic national importance and if managed well can impact relatively small areas. Though largely undeveloped at present, Indonesia has very high potential for tapping geothermal energy that could contribute significantly to a low emissions economy. Oil and gas reserves will also remain important until alternative energy sources can be developed.

The exclusion of rice production is understandable, as Indonesia is a net importer of rice, new production areas are unlikely to be significant, and areas covered by the Map are unlikely to be developed for rice production. Likewise, Indonesia is also a net importer of sugarcane. There are, however, ambitious plans to expand the development of large-scale sugarcane estates for export markets and/or to support biofuels development. If this expansion eventuates, the exemption of sugarcane may impact primary forest areas, most likely in Papua.

As noted above, Governors and Regents are suspended from issuing letters of recommendation for new developments, and such letters are required for these sectors. In principle, this could slow or prevent licensing for these industries from moving forward, despite their exemption from the moratorium. This point requires clarification.

Reaching the 7/26 Objective

Imposition of the moratorium is a positive step towards Indonesia implementing terms of the Lol with Norway. It would have been inconceivable for the moratorium to stop all further economic development of Indonesia's natural resources for a period of two years to achieve the dual objectives of 7/26, but the following important weaknesses of the PI must be highlighted:

1. The Indicative Map appears not to be consistent with the text of the PI; this creates uncertainty.
2. Up to 68 M ha of potentially high carbon stock secondary forest are excluded, and shallow peatlands and swamps (outside of primary forest) are

also excluded, potentially leading to upstream degradation of hydrologically linked deeper peatlands (some of which are covered by the moratorium).

3. Current MoF operations are excluded from the Map. Even if included, there is no restriction on (i) the extension or, in some circumstances, expansion of current licence, or (ii) mutation of current logging licences (potentially with high carbon stocks) to fibre plantations (with lower time-averaged carbon stocks).
4. Within Non-Forest Lands, agro-industries such as oil palm can continue to develop primary forest and peat lands if they have already obtained a licence area (izin lokasi) even in situations where development has not yet begun. There will be no restriction on issuing new licences on secondary forests (up to 16 M ha in Non-Forest Lands) or on shallow peatlands and swamps whose management is required to avoid degradation of interconnected deeper peat areas. Additionally, the rapid expansion of sugarcane envisaged for Papua may be able to move ahead unrestricted by the PI.
5. The text of the PI, when combined with the Map, provides limited encouragement to Provincial and Regency spatial planners to move towards low carbon development plans.

The magnitude of potential GHG emission deferrals likely to result from the PI as written, or that could have been deferred under alternative scenarios put forward for the moratorium (e.g. by the REDD+ Taskforce), is not possible to estimate with any precision. At present, insufficient data are available (e.g. no central database exists for licensing of oil palm estates before they obtain business use rights licenses, HGU), much of the required data is not public domain, and there is considerable uncertainty surrounding what limited data is available in the public domain (e.g. the extent and depth of peatlands and the above ground biomass of primary and secondary forests). In many respects, the 'breathing space' intended by the moratorium was to provide time to correct these data deficiencies, whilst taking advantage of opportunities to prevent future GHG emissions with limited economic cost. Due to the limited scope of the instructions imposed in the current text, and limited area over which they apply as depicted in the Map, the PI itself may be seen by many observers as a missed opportunity.

Moving Forward

There still remains much hope for achieving the 7/26 objectives. The major determinants of land use in Indonesia - MoF, Provinces, and Regencies - and the powerhouse driving economic development - business - can take voluntary actions to help Indonesia achieve its stated aims.

The MoF could voluntarily enact further regulations restricting development within Forest Lands to reduce emissions and avoid clearance/drainage of high carbon stock lands for fibre plantations. This could be done by tightening existing regulations on how forest is utilised or entering into agreements with industry to

shift existing but as yet undeveloped fibre plantations away from high carbon areas to low carbon areas within Forest Lands. This is totally consistent with Indonesia President Dr. H. Susilo Bambang Yudhoyono's own statement that the GoI is committed to allow the expansion of forestry and oil palm on to 'degraded lands'¹⁹. The MoF would therefore be well placed to enable this by releasing Forest Lands that are deemed low carbon/low biodiversity and not required for fibre plantations or other forestry replanting schemes.

The most effective way to achieve this reallocation of 'degraded' lands is through modification of proposed sub-national land use plans, at either the provincial or regency level. As noted above, Provinces and Regencies can modify their plans (subject to MoF approval) such that forested areas currently allocated for agricultural purposes could be brought into Forest Lands, and Forest Lands that are degraded could be re-allocated for agricultural expansion. This can be assisted by low carbon development plans such as those already developed by some provinces with the assistance of the National Council for Climate Change (DNPI), and by development of REDD+ pilot schemes at the Provincial level, such as in Central Kalimantan, or the Regency level where a number of projects operate (e.g. the Berau Forest Carbon Program). There is, however, urgency to enact these changes, as the majority of spatial plans will be made law in 2011, after which they cannot be modified for a five-year period.

Through voluntary certification schemes or other commitments to progressive corporate policy, business leaders can, and do, avoid development of high carbon areas such as peatlands, primary forest and mature secondary forests. Uptake of such voluntary commitments is on the rise, but it is not yet the business norm. Whether or not low-emissions business plans are economically viable depends in part on voluntary or regulatory actions in consumer nations, as well as those in producer nations such as Indonesia. Until such a time that progressive, responsible business models become the norm, the impact of business will be limited. Market-based solutions will become the norm when barriers to entry are sufficiently low and potential rewards (or avoided risk of penalties) are sufficiently high. Efforts to create such enabling conditions should be vigorously pursued.

Conclusion

The long-awaited PI is envisaged to function as a cornerstone of Indonesia's emerging policy reform efforts to place the economy on a path toward sustainable low emissions development. As written, the PI on its own appears unlikely to guarantee the full range of fundamental changes to planning, coordination and transparency required to achieve 7/26. It is, nevertheless, an unprecedented, positive step forward with potential to be improved and strengthened significantly in the coming months. The PI must be viewed not in isolation, but rather as one part of a larger set of national and sub-national initiatives blending public sector leadership with private sector support and civil society participation to reform land use planning and forest management in Indonesia. Significant challenges lie ahead for implementation, but the PI lays out a vision and foundation for moving forward in a coordinated fashion to invigorate the process of reform underway.

¹⁹ Keynote address to The Business for The Environment Summit 28/04/2011