

INTENDED TO FAIL? JATROPHA DEVELOPMENT PROJECT IN INDONESIA

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ABSTRACT

Article offers an analytical description of the legal framework of the Indonesian biofuel energy policy: commercialization of Jatropha. Its purpose is to explain why the legal framework failed. Methodology used to collect data is library research, including shifting through related legal documents. Additional information was collected through interviews with key informants. The purpose is to be able to place the relevant legal framework within a broader economic-political context. The main findings were that government intervention in the economic sector (commercialization of Jatropha), were made more in the spirit of poverty eradication programs and lessening government financial burden in providing cheap fossil fuel. Cautious approach based on economic calculations and other considerations (Jatropha not being sufficiently tested and developed as biofuel crop) as advised by researchers (2006) working under the auspices of the Ministry of Agriculture were simply ignored.

Keywords: *commercialization, Jatropha curcas, legal framework, economic regulation*

INTRODUCTION

The development of Jatropha as alternative energy to fossil fuel was initiated, emerged and latter on fizzles in Indonesia during the 2004-2006. Article attempts to offer an analytical description of the relevant rules and regulation, influencing the Indonesian bio-fuel energy policy, especially those that relates to the commercial utilization of Jatropha. In addition, the initiative to utilize the jarak shrub and develop it into a big commercialized scale (estate crop), must be placed within legal and policy framework of the energy sector.

There is the possibility that the answer to why the Jatropha idea emerged and fizzles are to be found not in analyzing the existing legal framework. It is not a purely legal issue at all. A better answer should be sought at the political plane. That it was simply a matter of no sufficient political will from the government to push things through, an unwillingness reflected into the non-issuance of technical guidance or directives required by bureaucrats at the lowest level to realize and implement central government plans (Vel & Makambombu, 2010). It is also possible that the answer is more leaning towards economic calculation than law or politics, i.e. the lack of interest shown by private companies (domestic/foreign investors) in utilizing economic opportunities created by the national policy on biofuel (Slette & Wiyono, 2011). It might be that the main obstacle is found from and within the fossil fuel management and utilization policy. Evidently every approach contains some truth, but could not by itself expose the complete story. Nonetheless, all partial explanation conveys similar problem: how government policies as translated into law and other government action influence economic decisions (Birkland, 2010). To expose how the Indonesian biofuel policy influenced the emergence of the Jatropha commercialization initiative and how it fizzles, a different approach should be used.

This study, for reasons explained below, will focus on what economic regulations inform and influence the behavior of entrepreneurs (farmers, entrepreneurs, investors). How did those economic regulations create opportunities or on the contrary hamper the development of the industry. There are a number of reasons underlying this particular choice. The success or the failure of developing palm oil or *Jatropha* estate and industry as well as *Jatropha* is related to the working of quite a number of legal rules/regulations issued by different government levels and actors. These comprises of laws regulating the establishment of economic enterprises (Company Law, Foreign/Domestic Investment Law), its operation and management (land acquisitions, permits and recommendations to be acquired, contract law), and all other legal issues related to it, such as labor law, the environmental management law, industry law, etc. Undoubtedly, it will be very difficult to provide a comprehensive view of the legal framework. What would be possible as had been conducted by other researchers is to choose and discuss one sector only (for example on those that pertain to the land acquisition or only referring to the permit system in place). However, the hard fact that there is no established specialized field of law focusing only on bio-fuel energy or the commercialization of *Jatropha* as a source of bio-fuel has to be accepted.

METHODS

Other articles discuss the legal framework of bio-fuel policy conducted for Indonesia or other countries tended to use a bird's eye perspective focusing on the energy and/or agricultural policy. A top-bottom and wide-angle approach, in illustration, can be found elaborating on laws (acts) developed in the energy and agricultural sector which either directly or indirectly pertains to the commercial utilization of *jathropha* as alternative energy (Soetoprawiro, 2013). In comparison, other authors discussing similar legal frameworks in China (Wang, 2011) or Mozambique (Schut *et. al*, 2010) opted for a more brief analysis. One critique of the above approach is that it fails to provide a satisfactory answer (from a legal viewpoint) about how the law (legal rules and regulations) relates to policy forming and implementation. How did the energy policy affect law making and to what extent did existing rules and regulation influence the commercialization of the *Jatropha* shrub (as biofuel source) (Colbran, 2011; Henning, 2004). What is implied by those legalistic approaches is that certain government policies (the commercialization of *Jatropha* shrub as a source of industrial bio-fuel and linked to that certain targets to be achieved within a certain time-line) if to be successfully implemented must be performed under the prevailing laws. It assumes the automatic and positive influence of the existing legal framework for policy making and implementation. Two other issues are neglected, i. e. which government agency is responsible and authorized to issue policy and bear the responsibility to implement and how non-governmental actors (the business community, individual entrepreneurs or others stakeholders) reacted to and influenced law and policy making.

Rather than using a wide approach the traditional legal science methodology, the use of the theory of economic regulation is suggested. The exposition of the relevant legal framework cannot by itself explain the emergence and the eclipse of the commercialization of *Jatropha* (Jarak). Using this approach, we can identify clusters of legal rules and regulations (soft as well as hard laws) which inform actors and influence economic decisions making. One important characteristic of such a cluster is that it is dynamic: which regulations are most relevant and provide new opportunities or in contrast discourages certain economic behavior changes all the time. With this it is also to avoid giving the impression, a trap easily entered when discussing legal frameworks of a certain policy, to present a comprehensive (covering 100%) overview. Instead with this perspective, it becomes clear how government policy works out through law in practice and how entrepreneurs (and government institutions/officials) made their decisions.

Stigler defines economic regulation as intervention (by the state or government) designed to affect market decisions made by firms and individuals (...) it's central task is to explain who will receive the benefits or burdens of regulation, what form regulation will take, and the effects of regulation upon the allocation of resources (Stigler, 1971). In comparison, Posner (1974) argued that economic regulation properly defined refers to taxes and subsidies of all sorts as well as to explicit legislative and administrative control over rates, entry and other facets of economic activity. Consequently, economic regulation can be found in law in its widest sense specifically those that affect the working of the market. In this sense, economic regulation is equated with government. Government regulation or public regulation refers to the implementation of rules by government agencies that are backed up by law. He goes even further by arguing that regulation means employment of legal instruments for the implementation of social-economic policy objectives (Aktan, 2011; OECD, 2008). This economic regulation approach corresponds with McAuslan advice on how to conduct research on the legal aspects and implementation of spatial or land use planning. He suggested to ask the what, why, who at what level questions; specifically to look for what rules/regulations (issued by which government level and which government actor) which really informs and influence patterns of actual or potential land use (McAuslan, 1981).

RESULTS AND DISCUSSIONS

There is a general consensus that the search for alternative energy source, including the search for developing biofuel including commercialization of *Jathropa Curcas* is based on the widely felt apprehension that natural oil and gas reserve of Indonesia would be depleted soon and the need to seek solution to Indonesia's economy high dependency to cheap supply of fossil fuel (Slette & Wijono, 2011). Anxiety about the sustainability of energy supply or energy security might be the one of the primary and official reason behind the issuance of the Presidential Regulation (PR) 5/2006 on the national energy policy. In PR 5/2006, the government stipulated that by 2025, biofuel use should reach 5% of the total national energy consumption and that this goal (Art. 3) must be achieved by developing primary and secondary/supporting policies, i.e. pursuing energy diversification programs and the determination of affordable price of energy taking into account economic feasibility while also considering the granting of subsidies to poor households (direct cash). PR 5/2006 also includes the instruction to formulate action plan: the national energy management blueprint 2005-2025). *Jatropha* as well as palm oil was not yet mentioned as a separate and important alternate energy source. To follow up, the President issued Presidential Instruction 1/2006 (supply and utilization of biofuel) and was addressed as well as contain a detailed distribution of authorities to 13 government agencies/ministries.

It is daunting to imagine how the president must muster and exerts his political clout to force those different ministries, coordinating and state ministries (without portfolios) as well as diverse ministries, all with their sectoral/specialized agendas, more often than not collaborating with members of opposing political parties rather than with the president's political party, to conjure up a cohesive and viable plan to coordinate their development plans and agenda to meet the stated goals in the Presidential regulation (2005) as well the instruction (2006). Adding to the complexity of coordination is that each ministry produces its policies backed up by a vast bundle of dynamic legal rules and regulations.

One important issue in this respect is how to guarantee good coordination, integration, synchronization (and added to its simplification) (Bedner & Niessen, 2003). Which government institution and at which level is responsible for what? Is the Bappenas (National Development Planning Board) or a special body/board established specifically for that task (the Dewan Energy Nasional (National Energy Board) established by virtue of Law 30/2007, or the *ad hoc* National Team

for Renewable Energy (TimNas BBN) which specific task is to develop a roadmap for biofuel development in the context of alleviating Poverty and Unemployment. (no name, 2007). One huge problem here is to find which government institution (or related private actor) is supposed to be responsible to influence how the biofuel policy is implemented into concrete actions. From a legal viewpoint, the question then will be put forward which legal rule will be directly relevant and in reality guide actor's behavior. It is all too clear that the development of biofuel industry (including the establishment of *Jatropha* estates as well as other crops), for its implementation, necessitates the delegation of certain tasks such as implementing campaigning and facilitating land allotment to the provincial and district government (Vel, 2012). To what extent does such distribution of power scheme induce the provincial and districts to do their best in realizing a top-down central government policy is a different question altogether.

Synchronization of all existing plans is a must. Ideally, a cohesive government plan should convey a clear message to would-be investors which business initiatives is or will be prioritized where and when. This is illustrated by both the Central Kalimantan Provincial government master estate crop development planning (*Rencana Induk Pengembangan Perkebunan/RIPP*) and Spatial Plan (Provincial Regulation 3/1993) which make possible the expansion of palm oil crop estates. In 2009, the government issued 302 permits for the palm oil industry, covering land amounting to 4,011,032.364 hectares to be divided into those that are already operational (144 units; 1,687,969.104 hectares) and those that are not yet operational (158 units; 2,323,063.446 hectares) (Sulaeman, 2009; Badan Penelitian dan Pengembangan Pertanian, 2012). This may be contrasted with findings from the fields as related to *Jatropha*.

As indicated by Vel (2012), the Service for Industry and Trade neglected its duties to campaign and market *Jatropha* as that Service had been more interested in eco-tourism development than agricultural commodity trade. Most likely the Service for Industry and Trade of West Sumba had different development goals in mind. As it is, contradictory master-plans (general-sectoral development planning, spatial planning land use planning) made by different government services (at different levels) was and is up to present not uncommon and this creates competition in the allotment of land. Ideally speaking, investors should be relying on existing spatial plans to see how many lands has been allotted to support what kind of business and where to acquire land.

Clarity and certainty of land allotment in the spatial plan, again ideally speaking, should determine whether or not investors may apply for permit-in-principle or site permit (Moeliono, 2011), both necessary to start acquiring the land for the planned business investment and which will also determine whether or not the investors will be eligible to apply for and obtain the estate crop permit (*izin usaha perkebunan*) (Roijen, 2012). At the same time, the same plan (or even rumors of certain land use plan) in practice more often than not result in mass land grabbing by actors (land speculators) who acquires "inside information". This great part contributes to the occurrence of land conflicts and disputes throughout Indonesia (Fairhead *et al.*, 2012).

Important for the creation of a vibrant biofuel market is the policy related to the permit (+ recommendation) system. Through the licensing/permit system, government agencies ought to be able to control access by regulating who may enter a particular business sector (biodiesel and/or *Jatropha* estate crop and processing). It might be that the licensing system is put in place but serves different goals aside from directing and controlling business actors' behavior. Both the business people and government agencies may disregard the system altogether or, more often than not, businesses people develop avoidance tactics by using other strategies, such as establishing or utilizing informal social networks to get things done and avoid red tape bureaucracy created by the vast and complex permit system.

In any case, referring to the Presidential Instruction, it is the Ministry of Energy and Mineral who hold the authority in controlling access to the *Jatropha* estate crop business. The Ministerial

Regulation of Energy and Mineral 51/2006 provides the conditions for and guidance (in obtaining) permit to trade biofuel (*persyaratan dan Pedoman Izin Usaha Niaga Bahan Bakar Nabati sebagai bahan bakar lain*). Pursuant to this special procedure (deviating from the general procedure for engaging in other crop estates outside biofuel crops) all enterprise entering the Jatropha estate crop sector, including the supply of, processing and trade of biofuel products must obtain a special permit that is biofuel business permit issued by the Ministry of Energy and Mineral. This authority might be delegated to the governor in case of enterprises with production capacity amounting to 10.000/annually or to the District heads in case of enterprises with production capacity less than 5000/annually. This ministerial regulation is followed by ministerial regulation 32/2008 on the supply utilization and marketing of biofuel (*penyediaan dan pemanfaatan dan tataniaga bahan bakar nabati sebagai bahan bakar lain*). This 2008 regulation stated that priority in granting permit should be given to cooperation, small scale enterprises and national companies (domestic investment) (Art. 21). In this regulation, it is found that a reflection of the *TimNas* triple strategy is pro-growth, pro job, and pro-poor. This might also explain why cooperation (or other small scale business enterprises), estimated to be millions are targeted to enter into this particular business. Nonetheless, foreign investors are also allowed to submit business permit applications (Roijen, 2012).

The official policy for developing or supporting bio-industry is thus that the primary economic actors i.e. Jatropha estate crops will be cooperatives (small and medium scale economic enterprises) under the auspices and with the financial support of the Ministry of Cooperation. Placed outside consideration is the issue whether existing small/medium scale groups of farmers (cooperatives) would possess the capital and necessary skill/techniques and are ready to enter the market which at that time (2006-2007) does not even exist or was at a preliminary (infant) stage. To what extent and for how long can they sustain economic loss due to market failures? It might be that linked to such calculations are policies to establish partnership and nucleus estates as found in the Ministry of Agriculture's road map of 2007 mentioned earlier. Findings from field studies conducted by Jarak researcher (Wijaya, 2012; Gunawan, 2012) revealed that farmers or other entrepreneurs who earlier decided to plant Jatropha were frustrated because no one seems to buy harvested Jatropha (Dewin, 2012).

The reason for the low market response may be influenced by a different factor. As illustrated by the case of Pura Group, which was in 2006 started a pilot project manufacturing Jatropha oil processing machines and adaptor kits to be attached to power generators using diesel fuel. They did more in the spirit of supporting energy self-sufficient villages a state-sponsored program rather than commercial considerations (Sujianto, 2006). This particular governmental goal stands out, i.e. the energy self-sufficient villages, which does not relate at all to the deliberate attempt to create supply and demand of Jatropha or other biofuels. In 2007, Purnomo Yusgiantoro, (then) Ministry of Energy and Mineral, introduced the Energy Self-Sufficient Village (*Desa Mandiri Energi/DME*) program. Villages are expected to produce and meet their own energy demands (...) and that will create new jobs, eradicate poverty and engender other positive activities (Purnamasari, 2012). There will be two types of DME: the first one which utilizes renewable energy such as micro hydro electrical power plants, solar energy or biogas, and the second one is DME that relies on biofuel.

CONCLUSIONS

The discussion reveals how the government initiated various schemes (government intervention through the biofuel policy as worked into rules and regulations) to create a sustainable biofuel market from Jatropha crop. To do that, the central government (the President) attempted to overcome bureaucratic hurdles and circumvent red tape by appointing the Ministry of Energy and Mineral as the main coordinator with the power to supervise how other ministries and government agencies implement the presidential instruction. At the same time, however, this initiative, rather than

reducing coordination-synchronization (governance) issues, resulted in more complex web of overlapping authorities. Simultaneously it stimulates over-dependence on the central government outreach and budgeting. It might be that it this dependency obstruct the establishment of a sustainable Jatropha biofuel market.

Another issue was that economic opportunities created through legal incentives (government intervention in the economic sector) particularly related to Jatropha were made more in the spirit of poverty eradication programs (pro-growth, pro-job and pro-poor) and lessening government financial burden in providing cheap fossil fuel (the DME program). Budget considerations apparently dominate. Not surprisingly cautious approach based on economic calculations and other considerations (Jatropha not being sufficiently tested and developed as biofuel crop) were simply ignored. Another issue is the ever present possibility of capture by nonstate actors or even by low-level bureaucrats who may create informal markets (in project or business proposals) or illicit trade in land (land grabbing) (De Soto, 2000). On a more abstract level, it is not so much the existing legal framework which is important in stimulating new emerging sectors or the establishment of the conducive investment climate, but what government initiatives were there and how it was translated into policies, rules, and regulations in the form of hard law or soft law. It is this approach of economic regulation which is believed may be more useful in analyzing governance of new or even more established economic sectors.

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