TRANSITING FROM AGRICULTURE TO AGRIBUSINESS – A MODEL FOR INCLUSIVITY AND SUSTAINABILITY FOR PADDY FARMERS

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ABSTRACT

Driving Malaysia towards a developed Nation is the Economic Transformation Plan (ETP) that aims to increase the Gross National Income (GNI) from RM 23,000 in 2009 to RM 48,000 per capita by 2020. It is also to increase opportunities for higher value jobs, for sustainable development. The issues of paddy farming still remain after all these years – small farms, aging farmers, the need to sustain paddy production for food security in a transiting economy and low water productivity. Under the ETP are the Entry Point Projects (EPPs) that are projects designed within each of the 10 National Key Results Areas (NKRAs). The theme for Agriculture NKRA is “Transiting from Agriculture to Agribusiness” and is in line with the Ministry of Agriculture and Agro Industry’s theme that “Agriculture is Business”. To address those persistent issues of paddy production affirmatively, is the EPP10: Scaling-up and strengthening of paddy farming in the Muda Area. The idea is to agglomerate individual farms and to increase average yield to 8 tonnes/ha by 2020. The targets are for a GNI of RM1 billion and the exit of 27,500 farmers. Replicating this is the EPP11: Scaling up, strengthening paddy farming productivity in other areas. The initial focus will be on incentives to encourage outsourcing of land management. The targeted GNI here is RM1.4 billion and for a reduction of 9,600 low-value jobs.

This is the first time for a “Game Changing” effort that includes exit plans for individual farmers through a compensation package, encouraging the formation of Special Purpose Vehicles (SPVs) formed either by farmers or private sector investors to produce paddy commercially and intensification of tertiary irrigation facilities. The EPP 10 began in 2011 with the target area of 50,000 ha (about 50% of the total Muda paddy area). Implementing this is not without challenges. This paper shares the concept of EPP10, the challenges faced and efforts for refining the approach. This includes revitalising the Water User Groups (Water User Associations) and plans for performance assessments and irrigation efficiency improvements.

Keywords: Irrigation, Paddy, Exit Plan, Transition, Agribusiness, MADA, Water User Group, Water User Association, Malaysia

1. INTRODUCTION

Following the Asian Financial Crisis of 1999, development investments in paddy irrigation in Malaysia were not significant. The country was comfortable with the policies of achieving 65% - 70% rice Self-Sufficiency Level (SSL) target and that achieving this in the long-term would be from the eight (8) matured Granaries (205,508 ha). The non-Granaries were to be gradually phased-out for non-paddy

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agriculture and non-agriculture landuse. These policies were re-emphasised by the National Agrofood Policy 2011-2020.

A major shift of those policies occurred in 2013 following the review of rice production from the perspective of National Food Security. Influencing this was the 2008 international rice price hikes that led to short-term and localised rice supply shortages situation in the country. This event exposed the country’s vulnerability of access to the balance of national rice supply that is dependent on international trade.

The policy response to the 2008 experience was a review of the National rice SSL to be more than 70%. Four (4) new Granaries were added (24,767 ha) and with the potential of incorporating the active non-Granary schemes (17,500 ha) at the fringes of the 8 matured Granaries into their respective adjacent Granaries. The National average yield, presently at just above 5 tons/ha for the Granaries, is now targeted to be at 8 tons/ha by 2020.

By 2020 too, the vision for Malaysia is to achieve a developed and high-income nation status. Driving this is the Economic Transformation Programme (ETP) (PEMANDU 2010) that aims for the Gross National Income (GNI) to increase from RM 23,000 in 2009 to RM 48,000 per capita and the creation of high value jobs by then. The ETP categorises 12 National Key Economic Areas (NKEAs) of which Agriculture (Food) is one. This Agriculture NKEA is expected to deliver an incremental GNI impact of RM 28.9 billion and 74,000 additional jobs by 2020. For each of the NKEA are the Entry Point Projects (EPPs). These are specially formulated projects that could significantly contribute to the ETP targets and are replicable elsewhere. The EPPs are based on three principle attributes of the ETP objectives - High Income, Sustainability and Inclusivity.

In attaining those objectives, the “Agriculture is Business” theme for Agriculture is re-emphasised by the ETP driving this sector with the theme “Transiting from Agriculture to Agribusiness”.

2. CHALLENGES FOR PADDY PRODUCTION

Achieving wealth (high income), sustainability and inclusivity in the Agriculture sector in a rapidly transiting economy is challenging. Although the sector is expected to achieve an annual growth rate of 3.5% between 2016 and 2020, its contribution to GDP is projected to decrease to 8% by 2020 and further down to 4% by 2050. This downward trend is also indicative of the declining attractiveness of agriculture in terms of securing investments and retaining talents in this sector compared to others. This is perhaps more challenging for the Paddy sub-sector where issues of small landholdings (average 2.2 ha/farm household) and aging farmers (average 60.2 years) are still inherent. Yet at the same time, there is a need to sustain this sub-sector for continued production for food security.

This paddy sub-sector is still the largest water user at 55.9% of the total water demands (ASM 2016). With the Water Supply Sector demands projected to continue increasing, the pressure is now on the paddy sector to share its waters and facilities that were once almost exclusive to the sector. This pressure is expected to be increasing as available unregulated flows are projected to decrease. In fact, the Northern Region of Peninsular Malaysia that is host to three of the matured Granaries, the situation is already in deficit. The water quality status in terms of National Water Resource Vulnerability Index also indicates deteriorating conditions. Recent events of severe floods (2014) and prolonged droughts (2015 and 2016) have exposed the vulnerable state of water security in a country that is relatively rich in water resources compared to many others. As the biggest user as well as returning
used water to the system, the paddy sub-sector has to accept the responsibility to improve this situation tremendously by adapting its systems for multi-use and users, increasing its water productivity and reducing wastages. It is estimated that the paddy irrigation system has the potential for water savings equivalent to 2,927 MLD, a substantial relief to the water supply sector needs.

3. INCLUSIVITY IN THE ECONOMIC TRANSFORMATION PLAN FOR THE PADDY IRRIGATION SUB-SECTOR

Perhaps one of the most ambitious plans and a “game changer” to ensure inclusivity of the paddy sub-sector in the ETP is the EPP10: Scaling-up and strengthening of paddy farming in the Muda Area (the MADA Granary). The idea is to promote commercial-scale farming, improve irrigation density and accelerate the use of new technologies to increase average yields to 8 tonnes per hectare by 2020. The expected outcomes are for a GNI of RM1 billion and the “exit” (the “Farmers’ Exit Plan”) of 27,500 farmers. The MADA Granary is the premier Granary covering 96,558 ha. and contributing 40% to the annual national production annually. It has proven to be economically resilient and sustainable in a transiting economy as well as able to meet the increasing demands on its water from the Water Supply and Energy (supply to an Independent Power Plant) Sectors.

Replicating this is the EPP11: Scaling up, strengthening paddy farming productivity in other Granaries. Unlike for the MADA Granary that includes tertiary system intensification, the initial focus here will be on incentives to encourage outsourcing of land management. The targeted GNI for this EPP is RM1.4 billion and for a reduction of 9,600 low-value jobs.

The main objectives of this EPP10 are, by 2020, to:

1. Increase paddy yields average from 5 tonnes/ha (2010) to 8 tonnes/ha;
2. Amalgamate of 50,000 ha of paddy area for the Paddy Estate Project; and,
3. Increase farmers annual income to RM48,000 by 2020.

The three main components of this EPP10 are:

1. Intensification of the irrigation infrastructure (to tertiary irrigation system level);
2. Implementation of the Paddy Estate Management; and,
3. Formation of Special Purpose Vehicle (SPV) to operationalize the Paddy Estate.

Out of the total RM2.7 billion for investment, RM2.2 billion is for the intensification of irrigation infrastructure and the balance RM0.5 billion is for paying out incentives to farmers for participating in the Paddy Estate project.

Since 1979 MADA has installed tertiary systems in 44 out of the total of 172 Irrigation Blocks (average block size 561 ha). These tertiary systems with canal, drain and farm road intensities at average 30m/ha have proven to be effective in terms of production efficiency and consistency. Recognising this, the EPP10 will include the installation of similar systems in the remaining 128 Irrigation Blocks (about 62,000ha) by 2020.

Perhaps the most interesting and challenging part of the EPP10 is the “Farmers’ Exit Plan”. The idea is for the amalgamation of 50,000 ha. of areas to be managed as Paddy Estates instead of by individuals thus the “exit” of 27,500 farmers (revised from
14,880 farmers) by 2020. Paddy Estate here is defined as a paddy area of not less than 40 ha but with a centralised management (Loh Kim Mon 2015) with a view that ultimately the single management will be agglomerated for one Irrigation Block. This centralised management is expected to be private sector-led but jointly and with active support of the Muda Agriculture Development Authority (MADA), the responsible authority of the MADA Granary. This is the joint venture SPV specifically formed for the paddy estate management. At the on-set, the private sector entity was to be BERNAS, a leading private entity involved in the paddy and rice industry. The need for MADA’s direct involvement in the SPV is primarily to assure the participating farmers that their interests continue to be protected by the Government.

Further assurances to allay farmers concern and perception that they will lose ownership of their land to the management entity is that there will not be any form of land consolidation of the paddy fields and lots as practiced in Japan and Korea. In the 1980s a land consolidation project was implemented in Kelantan but this model was not replicable in other paddy schemes due to farmers’ resistance. Thus, under this EPP10 and EPP11, there will not be any changes to the lot and physical boundaries as well as no changes in landownership as a condition for participation.

Three management models were considered namely the Fixed Rental, A Management Fee and Profit Sharing. Based on a survey of farmers’ preference, the Management Fee Model was the accepted model. In this model, farmers agree that the SPV will undertake the farm management totally over a period of 10 consecutive seasons (5 years) and in return to pay the management fees at RM 70/ton/ha/season. The SPV will provide the finances for on-farm investments and production and the profits returned to the farmers after deducting production costs and management fees.

Participating farmers will be offered a one-off incentive cash payment of RM 10,000/ha. This will be disbursed at RM 2,000/ha/season over 5 consecutive seasons.

The idea of paddy estate management is not new and has been promoted since the late 1980s. This model is to realise the opportunities of economies of scale and more importantly, for higher applications of scientific production and management approach to higher levels of productivity including water management. The success of establishing those estates has not been significant and farmers continue to operate as individuals.

The “Farmers’ Exit” model under this EPP10 is an affirmative approach that aims to capitalise on the existing farmers’ farming approach. Since the 1980s, the labour intensive activities have been replaced by mechanisation for land preparation and harvesting and direct seeding for transplanting. This subsequently led to the development of the service provider industry for these activities. Consequently farmers do not need to farm but instead have become farm managers of their own farm by employing the service providers for their farm activities. It is estimated that now 25% of the MADA Granary farmers as “Passive” farmers. These are those that employ the services of farm managers to totally manage production. The “Active” farmers are those that continue to be farm managers and employ the Service Providers. Thus the farmers can be considered as already in a state of preparedness for third party management of their respective farms. The need is therefore to encourage these individually managed farms to migrate into the paddy estate management for higher productivity and returns and therefore higher income.
4. IMPLEMENTATION EXPERIENCE

The tertiary system project for the 128 Irrigation Blocks are at various stages of planning and design with nearly 80% already completed. Of these, 40 are already ready for construction and awaiting for the land acquisition process to achieve 80% completion.

For the paddy estate component of the EPP10, it is reported that by the end of 2015, 25,000 ha of the targeted 50,000 ha. by 2020 have already migrated to the paddy estate. Based on this progress, MADA is confident that the target is achievable.

However, the initial proposal for the SPV to be based on the BERNAS-MADA JV has yet to materialise and negotiations are continuing. In the meantime, the SPV role is undertaken by the respective Area Farmers’ Organisation (Pertubuhan Peladang Tempatan (PPK)) under the Farmers Organisation Board (Lembaga Pertubuhan Peladang (LPP)) with MADA providing the technical support services. There are 27 PPKs in the MADA Granary and farmers are all members of their local PPK.

A significant initial feedback is that high achieving farmers that are now returning yields of 6 to 8 tons per ha. are reluctant to participate in the paddy estate scheme. This is perhaps understandable and future development and performance of the estates could perhaps encourage them to participate or even with the possibility of taking on the role of an SPV for their adjacent areas.

5. A POTENTIAL STRATEGY FOR DEVELOPMENT

One of the key attributes of the Paddy Estate Management approach is the formation of SPVs that is able to gain the confidence and support of farmers. A detailed model has yet to be developed and at the moment the PPK led management is found acceptable for the MADA Granary. EPP11 is for replication of the MADA Granary model in other 11 Granaries. One possibility of encouraging the formation of SPVs for estate farming is the use of the Water User Groups (WUGs) (also referred to as Water User Associations (WUAs) in other countries).

The generally accepted opinion amongst irrigation managers that WUGs would not be necessary in an estate paddy farming since there are effectively no “farmers” involved but the SPVs. Whilst this argument is acceptable, the expected migration to estate farming is still at an early state of transition especially in the other Granaries. There are still a high number of “Active” individual farmers compared to the MADA Granary. Issues of poor water management and non-conformance to irrigation schedules still prevail leading to wastages and poor water productivity. In addition, although the farmers are also practicing as farm managers, one of the negative impacts of outsourcing farm services is that the farmers are losing decision-making control and increasingly under pressure to meet the demands of service providers instead. This invariably has led to certain level of disquiet amongst farmers and also with irrigation systems managers when farmers are not able to comply with the schedules.

Under the circumstance, the Irrigation and Agricultural Drainage Division (BPSP) of the Ministry of Agriculture and Agro-Industry (MOA) has initiated a program to revitalise the WUGs that began in the 1980s and 1990s. The primary objective and focus of WUG continues to be for higher levels of on-farm water management as an integral component in efforts for higher water savings and water productivity. It is also to provide a platform for increased public participation in improving water security levels. However, experience in the KETARA Granary has shown that with concerted effort of system managers, the WUG could also be developed to be a cooperative. As
a cooperative, the WUGs are now able to negotiate better terms and conditions with service providers and some have even invested in farm machineries. As a cooperative, the WUGs are also able to generate additional non-farm income within and outside the Granary. As such, revitalising the WUG would not only support efforts for improved water management but could form a basis for forming an SPV for paddy estate farming that the farmers are all comfortable with.

6. CONCLUDING REMARKS

Ensuring inclusivity of the paddy production sub-sector of agriculture is challenging for an economy in transit. More so when the need to sustain this is to meet a National food security objective when farmers are concerned at not being economically marginalised. The EPP 10 and EPP 11 of the Economic Transformation Plan are designed to ensure inclusivity through the paddy estate farming approach. The paddy farmers are already in a position to accept this since the approach to paddy farming is now through outsourcing of farm activities. The incentive scheme and the management model under implementation are showing positive results in the MADA Granary. The need is to develop strategies to encourage the formation of SPVs to lead the estate management. A potential model is through the WUGs that could be nurtured to subsequently developing as SPVs that the farmers are comfortable with.

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