

## Checklist for Agricultural Engineering Sector (Policy) – Anglophone Group

| Actors on supply chain      | Check list - what they have to do (related to capacity needs)  | Check list – what enabling environment they need to be able to do business                         | Enabling environment that government can provide   |   |
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|                             |  |  | Policy Options   | Actions   |
| International manufacturers | <ul style="list-style-type: none"> <li>Quality assurance, including warranty on exported machinery</li> <li>Reliable supply of spare parts,</li> </ul> | <ul style="list-style-type: none"> <li>Large market scale</li> <li>Reliable dealerships</li> </ul> | <ul style="list-style-type: none"> <li>Policy &amp; strategy on agricultural mechanization(MOA)</li> <li>Test &amp; evaluation, safety inspection and certification of quality of machinery (MOA)</li> <li>Tax incentives such as reduced import tariffs for machinery and spare parts (MOF)                             <ul style="list-style-type: none"> <li>Waive/reduce tariff for those machineries and implements that could not be manufactured locally</li> <li>Impose after-sales service, warranty and supply of spare parts as pre-conditions</li> <li>Register the trade mark and copy rights in the country</li> <li>Strict legislations and enforcements on counterfeit products</li> <li>Promote competition amongst international manufacturers and dealers</li> <li>Wherever applicable, encourage multiple dealers to avoid monopoly</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>Enforce standards and regulations on quality of imported machineries and implements through quality verification, field testing and certification processes</li> </ul> |
| Importing agents            | <ul style="list-style-type: none"> <li>Adequate stocks for immediate delivery</li> <li>Local</li> </ul>  | <ul style="list-style-type: none"> <li>Quick issue of L/C</li> <li>Short entry</li> </ul>          | <ul style="list-style-type: none"> <li>Tax incentives such as reduced import tariffs for machinery and spare parts (MOF)</li> <li>Short entry (MOT)                             <ul style="list-style-type: none"> <li>Waive/reduce tax on imported farm machineries, implements and spare parts</li> </ul> </li> </ul>  | <ul style="list-style-type: none"> <li>Enlist minimum qualifications and pre-requisites (workshop, human capacity) for importers</li> </ul>   |

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|                       | assembling   |   |   | <ul style="list-style-type: none"> <li>• Enforce appropriation and standardization of machineries being imported</li> <li>• Facilitate clearance of the imported machineries at customs through fast track</li> </ul>  |
| Domestic manufactures | <ul style="list-style-type: none"> <li>• Ability to produce machineries (engineering standard) at reasonable cost</li> <li>• Quality control and warranty of products</li> </ul> | <ul style="list-style-type: none"> <li>• Reduced import duties for raw materials,</li> <li>• Engineering standard</li> <li>• Loans</li> <li>• Delivery network</li> </ul> | <ul style="list-style-type: none"> <li>• Qualified engineers (Universities)</li> <li>• Reduced import duties for raw materials (MOT)</li> <li>• Engineering standard (MOI)</li> <li>• SME promotion including loans (MOC, MOI)</li> <li>• Reduce/waive tariff for raw materials for manufacturing farm machineries and implements</li> <li>• Provide incentives (such as land, electricity, etc.) for setting up manufacturing units</li> <li>• Provide tax holidays for short- and medium enterprises</li> <li>• Intellectual Property Rights – Prevent the design and production of locally manufactured machineries and implements from being copied /counterfeits</li> <li>• Improve credit facilities, schemes (start-up funds, seed funds, soft loans, etc.) to promote SMEs in farm machineries</li> </ul> | <ul style="list-style-type: none"> <li>• Enforce appropriation and standardization of machineries being locally manufactured</li> <li>• Fast-track the licensing and registration of products</li> <li>• Increase human capacity on research, design, testing, and promotion of locally manufactured items</li> <li>• Promote manufacturing business incubation models</li> <li>• Promote close collaboration between R&amp;D units and local manufacturers</li> </ul> |

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| Material suppliers  | <ul style="list-style-type: none"> <li>• Supply of raw materials and machine elements</li> </ul>   | <ul style="list-style-type: none"> <li>• Quality materials</li> <li>• Timely supply</li> </ul>   | <ul style="list-style-type: none"> <li>• Tax incentives for farm machinery production</li> <li>• Reduce/waive tariffs on imported raw materials</li> <li>• Reduce/waive Value Added Tax for local suppliers of raw materials</li> <li>• Encourage regional trades with zero tariff for raw materials</li> </ul>   | <ul style="list-style-type: none"> <li>• Ensure uninterrupted availability of electric power to manufacturing units</li> <li>• Improve accessibility through improved infrastructure (transportation)</li> </ul>  |
| Dealers<br>Distributors<br>Retailers<br>Traders<br>(this including transport) | <ul style="list-style-type: none"> <li>• Repair and maintenance of imported machines</li> <li>• Stocks of standard spare parts</li> <li>• Operator training</li> <li>• In-house credit</li> <li>• Resale of second hand equipment</li> </ul> | <ul style="list-style-type: none"> <li>• Two step loans, Soft loans</li> <li>• Large scale market</li> <li>• Delivery network</li> </ul> | <ul style="list-style-type: none"> <li>• Soft loans (MOI, MOF)</li> <li>• Mechanization promotion (MOA)</li> <li>• Operator training (MOA)</li> <li>• Increase access to finance through soft line of credit for dealers, distributors and traders through banks and microfinance institutions</li> <li>• Incentivize setting up dealerships in remote and rural areas</li> <li>• Promote fairness and transparency in pricing, quality of tools being sold – encourage associations and competition amongst dealers</li> </ul> | <ul style="list-style-type: none"> <li>• Train and License: Provide training, knowledge and information on farm machineries and tools that are appropriate for local use</li> <li>• Require registration of dealers, distributors, retailers and traders of farm machineries</li> <li>• Use of Information and Communication Technology tools to promote the access to farm machineries and implements</li> <li>• Enforce appropriation, standards and quality of tools being sold</li> </ul> |

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|                                 |   |  |  | <p>through the dealers – black list/penalise those who do not comply standards</p> <ul style="list-style-type: none"> <li>• Set up a fairness committee under the Ministry of Trade/Commerce to oversee the pricing</li> <li>• Establish linkage between dealers/distributors and farmers’ cooperatives/associations and service providers and promote bulk purchasing and bargaining</li> <li>• Promote demand for farm machineries and implements by creating awareness campaigns and stakeholder forums</li> <li>•</li> </ul> |
| Local workshops for maintenance | <ul style="list-style-type: none"> <li>• Adequate skills of maintenance ( Periodical</li> </ul> | <ul style="list-style-type: none"> <li>• Market (Sufficient number of customers who</li> </ul> | <ul style="list-style-type: none"> <li>• Vocational training (MOI)</li> <li>• Encourage private investments in setting up workshops in rural and high production areas (what are the tools to encourage?)</li> </ul> | <ul style="list-style-type: none"> <li>• Provide license and training to workshops engaged in farm machineries</li> </ul>  |

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|                         | <ul style="list-style-type: none"> <li>and preventive)</li> <li>• Availability of spare parts for timely delivery</li> <li>• Minimum business skills</li> </ul>    | <ul style="list-style-type: none"> <li>can afford to services in a certain area)</li> <li>• Favourable cost-benefit framework for sustainable operation</li> </ul> |   | <ul style="list-style-type: none"> <li>• Require registration of workshops</li> <li>• Increase human capacity through awarding diploma/certificate programs on basic mechanical engineering</li> </ul> |
| Financiers              | <ul style="list-style-type: none"> <li>• Low interest credit, Long repayment period credit</li> </ul>  | <ul style="list-style-type: none"> <li>• Soft loans</li> </ul>   | <ul style="list-style-type: none"> <li>• Two step loans (MOI, MOF)</li> <li>• Economic infrastructure(MOF)</li> <li>• Increase access to credit to all the actors along the supply chain by providing soft loans and lines of credit</li> <li>• Encourage microfinance institutions and rural banks to finance setting up of workshops, dealerships, importation and manufacturing of farm machineries and implements</li> <li>• Provide Guarantee funds to users on purchase of farm tools</li> <li>• Encourage cooperatives and associations to take loans on common collaterals</li> </ul> | <ul style="list-style-type: none"> <li>• Provide training on business and contractual skills of cooperatives, associations</li> </ul>  |
| Custom hiring providers | <ul style="list-style-type: none"> <li>• Information network,</li> <li>• Access by farmers</li> <li>• Reasonable cost</li> <li>• High rate of operation</li> </ul> | <ul style="list-style-type: none"> <li>• Loans</li> <li>• Adequate number of customers</li> <li>• Favourable cost-benefit framework for sustainable</li> </ul>     | <ul style="list-style-type: none"> <li>• Loans (MOA, MOF)</li> <li>• Privatized hiring service (MOA)</li> <li>• Encourage rural entrepreneurs and medium scale farmers to invest in farm machineries and tools (what are the tools to encourage?)</li> <li>• Increase access to finance for the custom hiring providers through long term soft loans towards the purchase of machineries</li> </ul>   | <ul style="list-style-type: none"> <li>• Enforce quality and standards of operations and machineries being hired</li> </ul>  |

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|                           | <ul style="list-style-type: none"> <li>• Business skills,</li> </ul>  | <ul style="list-style-type: none"> <li>• operation</li> <li>• Less seasonal fluctuations(double cropping)</li> </ul>   | <ul style="list-style-type: none"> <li>• Promote Contractual farming and machinery services</li> <li>• Provide tax incentives (reduce/waive service tax/income tax)</li> </ul>  |  |
| Milling service providers | <ul style="list-style-type: none"> <li>• Quality milling</li> <li>• Reasonable cost</li> <li>• Accessible location (proximity to rice producing area) by farmers</li> <li>• High rate of operation</li> </ul> | <ul style="list-style-type: none"> <li>• Less seasonal fluctuations(double cropping)</li> <li>• Assured market access (distance from markets, road network)</li> <li>• High quality rice market</li> </ul> | <ul style="list-style-type: none"> <li>• Rice quality standard (MOA, MOC)</li> <li>• Privatized milling service (MOA, MOC)</li> <li>• Rice marketing promotion (MOC)</li> <li>• Incentivise milling services in low production areas</li> <li>• Promote private investments in milling services in high production areas (what are the tools to promote?)</li> <li>• Increase access to market information (production volumes, pricing)</li> </ul> | <ul style="list-style-type: none"> <li>• Provide electricity in milling areas</li> <li>• Improve infrastructure (roads, hygiene, housing, etc.) of mills</li> <li>• Provide training on appropriate standards (quality of harvested paddy grains, machineries, breakage of milled grains, grading, etc.) in rice processing</li> <li>• Enforce standards and quality of milling process</li> <li>• Establish linkage with farmers, traders (paddy and rice) and consumers</li> </ul> |
| Machine operators         | <ul style="list-style-type: none"> <li>• Adequate technical ability to operate and maintain</li> </ul>  | <ul style="list-style-type: none"> <li>• Market (Sufficient number of customers who can afford to</li> </ul>   | <ul style="list-style-type: none"> <li>• Training on operation and maintenance (MOA)</li> <li>• Train and license machine operators</li> <li>• Encourage formulation of an organization of machine operators</li> </ul>   | <ul style="list-style-type: none"> <li>• Establish vocational training and refresher courses</li> <li>• Enforcement of rules and regulation of</li> </ul>  |

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|   | machinery  | services in a certain area)  |   | <p>proper machinery use and safety</p> <ul style="list-style-type: none"> <li>• Ensure uninterrupted availability of electric power to manufacturing units</li> <li>• Enforcement of labour laws</li> </ul>   |
| Small scale farmers, Farmers' association | <ul style="list-style-type: none"> <li>• Financial capacity to purchase, operate and maintain machineries</li> <li>• Technical skills to operate and maintain machineries</li> <li>• Minimum skill of business management</li> </ul> | <ul style="list-style-type: none"> <li>• Proximity, quality and affordability of machinery services</li> <li>• Improved cost-benefit of farming through mechanization</li> <li>• Group use of machinery</li> </ul> | <ul style="list-style-type: none"> <li>• Promotion programme for machinery group use (MOA)</li> <li>• Loans (MOA, MOF)</li> <li>• Purchase subsidy (MOA)</li> <li>• Training on business management</li> <li>• Extension services (MOA)</li> <li>• Establish land consolidation policy - Encourage consolidation of farms to allow promotion of the use of more modern machinery (this could be controversial)</li> <li>• Increase access to production and market information</li> <li>• Provision of subsidies, soft/low interest agricultural loans for the purchase of equipment and machineries</li> <li>• Promote extension services through farmer field schools</li> <li>• Subsidise critical agricultural machinery to farmers</li> <li>• Promote farmers' Savings and Credit Cooperative Societies</li> <li>• Promote machinery hire services amongst farmers – establish regulations, information on availability and guidelines on provision of the services</li> </ul> | <ul style="list-style-type: none"> <li>• Train farmers in marketing/production/value chain development</li> <li>• Sensitize and mobilise the small farmers (individuals, cooperatives) on Land Consolidation</li> <li>• Encourage formation of cooperatives/ interest groups on mechanization</li> <li>• Assist entrepreneurs to capture and add value to on-farm, post harvest and off-farm enterprises</li> </ul> |
| Animal                                    | • Feed supply,   | • Veterinary   | • Qualified veterinarians (MOA)   | • Train farmers in basic  |

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| draught power users |  | service,<br>• Skilled trainers,<br>Equipment | <ul style="list-style-type: none"> <li>• Increase access to production and market information of draught animals (oxen)</li> <li>• Encourage formation of cooperatives/interest groups</li> <li>• Subsidisation/Provision of soft/low interest agricultural loans to acquire animals and implements</li> <li>• Promote hiring services to farmers who do not own animals for power</li> <li>• Promote local manufacture of animal drawn implements</li> </ul> | animal health and nutrition(harnessing, use, care, feeding) <ul style="list-style-type: none"> <li>• Establish community based fabrication workshop for farm implements and spares</li> <li>• Establish source of proven breeds of oxen</li> <li>• Put in place a community based animal health and nutrition support program</li> </ul> |
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