



REPUBLIC OF RWANDA

The Ministry of Agriculture and Animal Resources

NATIONAL FERTILIZER POLICY

JUNE 2014

FORWARD

Agricultural growth of 8.5% per annum has been targeted as a key contributory driver to economic growth and poverty reduction. This growth hinges on agricultural intensification. Recognizing, however, that Rwanda is characterized by low soil productivity due to nutrient depletion arising from over cultivation and soil erosion, it is imperative that increased and judicious use of fertilizers is adopted to achieve agricultural intensification. PSTA III targets that fertilizer use of 45Kg/Ha which translates to 55,000MT of fertilizers. This still is below the target as contained in the Abuja Declaration on Fertilizer for an Agricultural Green Revolution of 50Kg/Ha.

Government mandates the Ministry of Agriculture and Animal Resources to create an enabling environment for the development of the Fertilizer sub-sector and MINAGRI has the responsibility of developing policy instruments to increase the supply and demand for fertilizers, local production and attract private sector investment in the Fertilizer sub-sector.

This Fertilizer Policy has been developed by the Government of Rwanda to support the implementation of a private led, liberalized and competitive fertilizer subsector that leads to economic growth through the sustainable availability, access and efficient use of fertilizer that is backed by science. The policy incorporates gender and environmental concerns, and fosters linkages with stakeholders in the sub-sector and is gender and environmentally sensitive.

The Policy has been developed with the support of Agricultural Sector Working Group. The invaluable input of the International Fertilizer Development Center in the development of this Fertilizer Policy is acknowledged.

This National Fertilizer Policy is a confirmation of Governments commitment to address low productivity associated with soil infertility and soil nutrient deficiencies.

ACRONYMS

ASIP	Agricultural Sector Investment Plan
BTC	Belgian Technical Cooperation
CIP	Crop Intensification Program
COMESA	Common Market for Eastern and Southern Africa
DAP	Diammonium phosphate
DFA	District Field Agent
EAC	East African Community
EPDRS II	Second Economic Development and Poverty Reduction Strategy
FFS	Farmer Field School
GDP	Gross domestic product
GoR	Government of Rwanda
Ha	Hectare
IFDC	International Fertilizer Development Center
Kg	Kilograms
LWH	Land husbandry, water harvesting, and hillside irrigation
MINAGRI	Ministry of Agriculture and Animal Resources
MINECOFIN	Ministry of Finance and Economic Planning
Mt	Metric tons
NPK	Nitrogen, phosphorus, potassium
NUR	National University of Rwanda
PSTA III	Strategic Plan for the Transformation of Agriculture
RAB	Rwanda Agriculture Board
RICA	Rwanda Inspection and Competition Authority
RSB	Rwanda Standards Board
RSSP	Rural Sector Support Project
TUBURA	One Acre Fund

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1.0 Introduction

It is Rwanda's vision to transform agriculture into a productive, high value and market oriented sector by the year 2020.

The Second Economic Development and Poverty Reduction Strategy (EPDRS II), which is guided by the revised targets to Vision 2020 aims to hasten the pace of economic transformation and poverty reduction by accelerating the pace of country's attainment of a medium income country status with Rwandans having better life, through attaining growth of 11.5% per year and poverty below 30% by 2020.

Within this context, the agricultural sector, the backbone of Rwanda's economy, currently contributes to 34% of GDP. By 2020, it is targeted that agriculture contributes to 25% of GDP. Therefore, agriculture shall continue to contribute significantly to the economy. To attain the EDPRS II goals, the agriculture sector instituted the Strategic Plan for the Transformation of Agriculture (PSTA III). PSTA III aims to intensify and commercialize agriculture and targets to attain an annual agricultural growth of 8.5%, annual export growth of 28% and 40% of land under modern agriculture.

To this end the Government of Rwanda is pursuing agricultural development through:

- Agriculture and Animal resource intensification and commercialization by cross sector investments and improved market links;
- Research, technology transfer and professionalization of farmers;
- Increasing outputs and quality of crop & livestock products and targeted nutrition programs; and,
- Value chain development and private sector investment Institutional development and agricultural cross-cutting issues;

Over the last decade, there has been tremendous agricultural growth that has averaged 6% per annum. The Crop Intensification Program (CIP) that begun 2007 has been a major contributory factor to this growth. The program has emphasized improving the availability, access and use of fertilizers. Government embarked on the bulk procurement of fertilizers while developing a private led distribution system. There has been a resultant increase in fertilizer access and use, and productivity of major staples. This has been facilitated by government subsidies that made fertilizers affordable and advisory extension services the promoted fertilizer use. The use of fertilizers and improved seeds have led to a national productivity increase of three and five fold for maize and wheat, respectively, and two fold for rice and Irish potatoes, contributing to improved food security and increased rural incomes.

Fertilizer use increased from 4Kg/Ha in 2006 to 30Kg/Ha in 2013, while fertilizer availability increased from annual quantities of 8,000MT to 35,000MT. PSTA 3 targets that fertilizer availability increases to 55,000MT per year and fertilizer use increases to 45kg/ha in 2017/18. Further, in line with the strategies for the development of the fertilizer sector, the fertilizer import and distribution system has been privatized. The private importers, distributors and agro dealers have been facilitated to invest in the fertilizer sector. Private importing companies' numbers have increased from three (3) to five (5) in a space of two years following privatization. Government subsidies have been reduced from 20-50% of retail prices to 15-35%. Despite these achievements with the development of a fertilizer importation and distribution system several challenges exist: These are:

1. Low fertilizer use (compared to other countries), resulting in:
 - a. Low yields;
 - b. Low farm incomes;

2. Inadequate economic returns to fertilizer use due to narrow range of formulations
3. Nutrient use inefficiency at the farm level
4. Lack of sustainable availability and access to fertilizers
 - a. Not enough companies involved in imports
 - b. Limited competition
5. Lack of an effective quality control and regulation in fertilizer marketing and use
6. Government led input programs expensive and not easy for private companies
 - a. Government cost per ton too high to support expanded use and require heavy subsidies
 - b. Subsidies directed to few companies, products
 - c. Strengthen quality control to accommodate more importers, products
7. Lack of utilization of locally available raw materials for fertilizer production

To address these challenges a comprehensive fertilizer policy has been developed. The policy covers the following aspects:

1. Fertilizer Production
2. Imports and Exports
3. Fertilizer Trade and Marketing
4. Promotion of fertilizer use
 - i. Extension
 - ii. Subsidies
 - iii. Agriculture and Rural Finance
5. Research and Development
 - Updating recommendations,
 - Soil surveys.
6. Regulation and Quality Control (standards etc.)

7. Environmental Considerations

- Increase fertilizer use efficiency (briquettes etc.)
- Synchronized applications: timing of applications and split applications

8. Gender focus

9. Governance and Institutional linkages

The implementation of this fertilizer policy summarized above shall be supported by technical services, monitoring and evaluation of its implementation and updating of the policy as need arises.

2.0 Rwanda Fertilizer Policy

2.1 Definitions of Fertilizer

“Fertilizer” refers to any substance containing one or more recognized elements (s) that is used for plant nutrition and is designed for use in promoting plant growth.

Specifically:

- a) “Mineral/inorganic fertilizer” means fertilizer produced by mineral processes or mined and derived from an organic substance or synthetic organic substance.
- b) “Organic fertilizer” means fertilizer derived from non-synthetic organic material, including sewage sludge, animal manures, and plant residues produced through the process of drying, cooking, composting, chopping, grinding, fermenting or other methods and makes a declaration of nutrient value on the label.
- c) “bio-fertilizer” means a substance which contains living microorganisms which colonizes the interior of the plant and promotes growth by increasing the supply or availability of primary nutrients.

2.2 Vision of the Policy

To have a functional and efficient private sector led fertilizer sector that is responsive of farmers' needs and the environment.

2.3 Mission of the Policy

To have a competitive and profitable fertilizer sector that ensures fertilizer access and affordability at farm gate in a timely manner creating acceptable fertilizer use by farmers for increased and sustainable agricultural productivity and farm incomes.

2.4 Overall Objective of the Policy

The objective of the policy is to contribute to increased agricultural productivity, economic returns and incomes through increased and sustainable access and use of fertilizers.

2.4.1 Specific Objectives of the Policy

- i. Create an enabling environment for the development of a privately driven and liberalized fertilizer importation and distribution system that fosters competition and innovation;
- ii. Promote fertilizer trade by introducing appropriate and effective incentives that encourage investment by the private sector;
- iii. Establish an efficient regulatory and monitoring system that is private sector friendly and ensures the sustainable supply to high quality fertilizer products along the distribution chain in a manner that safeguards human health and the environment;
- iv. Create awareness and improve knowledge of the benefits of fertilizers;
- v. Promote diverse fertilizer products and technologies (improved seeds, irrigation, soil conservation, lime) that enhance efficient utilization of fertilizers

- vi. Promote integrated nutrient management and conservation agriculture for environmental sustainability.
- v. Establish incentives that permit increased access and use of fertilizers at affordable rates by all the farmers. Such incentives shall not be limited to Agriculture Finance, Insurance and Subsidies.
- vi. Support agricultural research and development to improve farmers' returns to investment to fertilizers through establishing crop and area specific soil nutrient requirements and fertility levels to improve the fertilizer use efficiency, higher yields.
- vii. Facilitate the application of balanced fertilizer in line with crop and area specific soil nutrient requirements of the different cropping systems and agro-ecological zones, based on soil testing and fertilizer trials;
- viii. Support the local production of fertilizers through the exploration of local resources (methane and lime) and fertilizer manufacture and blending to ease access and reduce cost of fertilizers;
- ix. Foster institutional linkages and gender issues in implementing the policies;
- x. Promote the harmonization of fertilizer policies at regional levels.

2.4.2 Expected Outputs

The following are expected when the policy comes into effect:

1. The judicious use of Fertilizer to achieve a fertilizer use of 45Kg/Ha by 2017 and to address the severe declining soil fertility status improving agricultural productivity thereby contributing to the attainment of agricultural growth of 8.5% per year;
2. Public institutions and the private sector partner to respond to national fertilizer needs and ensure the sustainable availability and access of appropriate fertilizers that are affordable for farmers;

3. Research and Development at the forefront of establishing site and crop specific recommendation;
4. Balanced fertilizers and scientifically advance techniques promoted to improve the efficiency, effective and environmentally sustainably fertilizer use;

2.4.3 Guiding Principles

The guiding principles behind the choice of policy instruments are articulated as follows:

The principle of holistic approach, which pertains to the multi-faceted nature of fertilizer as a mineral, an organic substance, an industrial product, an agricultural input, as well as a tradable commodity.

The principle of credibility, which requires that the fertilizer policy should be credible in terms of the due process for its formation, appraisal, implementation and review

The principle of equity, which pertains to the fact that individuals are not equitably endowed but yet require minimum resources to sustain their livelihoods.

The principle of market friendliness: The policy instrument should be consistent with the promotion of a competitive fertilizer market.

The principle of legality: The policy instruments require appropriate legislations to back them up.

The principle of regional consistency: The national policy instruments should be in harmony with regional policy dispensation on fertilizer.

The principle of partnership and dialogue: All stakeholders in the fertilizer sub-sector should be constantly involved in the implementation, monitoring and evaluation processes of the policy instruments.

The principle of gradual approach: Whenever necessary policy reforms on fertilizer and changes should be gradual within the time frame agreed upon by stakeholders.

The principle of fiscal responsibility: Which requires that necessary resources be committed to the implementation of fertilizer policy.

The principle of truth-in-labelling: All fertilizer products offered for sale in Rwanda are properly labelled with a guaranteed analysis and net weight, and the quality control of the products is based on the truthfulness of the claims on the label. For organic fertilizer, validated through field testing

Principle of balanced fertilization: which requires the provision and use of macro and micronutrients in balanced proportions based on soil testing and crop requirements for different agro ecological zones.

Principles of environmental integrity, which calls for efficient fertilizer use based on the need to protect and conserve the environment.

Principle of risk management, which calls for informed decision making that explicitly, addresses uncertainty.

3.0 Policy Direction

In line with Vision, Mission, Objectives and guiding principles articulated above, the following shall be the Policy direction for Fertilizer subsector in Rwanda.

3.1 Fertilizer Production

The government of Rwanda shall encourage the development of local fertilizer production capacity, through promoting the exploration of available natural resources to manufacture fertilizers. This shall be backed by feasibility studies. The government shall encourage investments into the production of fertilizers from the country's raw

materials. Already a feasibility study for the production of urea from methane gas in L. Kivu exists and government is encouraging private investment.

The government of Rwanda shall encourage the production of fertilizers by providing incentives available for private investments in the country.

Private investments into fertilizer productions shall comply with requirements in relevant policies, laws and regulatory instruments existing in the country.

The production of fertilizers formulations from raw materials or through blending shall be based on crop nutrient requirements for the different soil types, soil fertility zones and agro ecological zones.

3.2 Imports and Exports

Importation of fertilizers shall be the responsibility of the private sector in partnership with the government.

All private companies are free to import fertilizer, but shall adhere to the legal and regulatory framework existing in the country. The importation of subsidized fertilizers shall be conducted by private companies in partnership with the government of Rwanda.

Government shall advise companies to import required fertilizer types and quantities according to the timeliness of cropping seasons.

The government of Rwanda shall encourage the private sector to consider bulk procurement of fertilizer imports to benefit from economies of scale and reduce cost. The government shall consider bulk procurement initiatives developed at the regional level (such as EAC and COMESA).

Fertilizer imported into the country shall meet the soil fertility and crop nutrient requirements for the different agro ecological zones, relevant laws and regulations,

particularly, the Agro Chemical law and Ministerial Instructions governing agro chemicals, agro dealers and premises;

Importers shall conform to the requirements in existing laws and regulations, and request for a permit for fertilizer consignments being imported into the country. Private exports shall also adhere to this requirement. There shall be no export of fertilizers that are subsidized by government.

Each fertilizer consignment imported into the country shall be accompanied by a manufacturer's certificate, bill of lading and a pre-shipment inspection certificate and other requirements as may be required by the RSB, RICA an MINAGRI.

3.3 Fertilizer Trade and Marketing

The private sector shall be primarily responsible for fertilizer trade and marketing. Government shall facilitate the private sector and perform a regulatory role.

3.3.1 Improving supply: Privatization and liberalization of the fertilizer market

All private wholesalers (distributors), retailers (agro dealers) are free to trade and market fertilizer within the country, however, they must operate under the legal and regulatory framework existing in the country.

Government shall introduce support mechanisms to facilitate increased fertilizer use by farmers through introducing interventions such as subsidies, but these should not distort the market. Private sector shall participate in trading of fertilizers subsidized by government in a transparent and competitive environment.

Generally, fertilizer prices shall be governed by market forces. Where government provides subsidies to support farmers, a fertilizer price relaxation approach shall be introduced, i.e., move away from fixed prices, to the introduction of upper limit fertilizer prices (ceiling prices) and finally removal of price controls.

The government shall introduce support mechanisms for the private sector to invest in fertilizer trade and marketing, partnering with financial institutions and stakeholders to provide finance and reduce risk associated with access to finance.

Government shall routinely provide reliable price information on regional and international markets;

Distribution of fertilizers shall be informed by district fertilizer requirements in terms of crop requirements and quantities. The fertilizer distribution channel existing in the country (importer-distributor/agro dealer cooperatives-agro dealers-farmers) shall be monitored and fertilizer inspected along the distribution chain to ensure quality is maintained and delivery is timely;

Establish an effective and efficient information system linking importer, distributor and agro dealer networks to the Ministry of Agriculture and Animal Resources and local governments to improve fertilizer trade and market efficiency;

Support facilities to improve fertilizer use such target subsidized fertilizer that is priced in partnership with government, should be monitored by local governments and district/extension officers to ensure that the subsidies go to the targeted beneficiaries.

3.3.2 Increasing demand: promoting fertilizer use

3.3.2.1 Extension

Government through the Rwanda Agriculture Board shall provide technical guidance in developing and implementing extension programs aimed at promoting fertilizer use. The local government, the private sector and relevant stakeholders shall partner with RAB to establish and implement FFS, demonstrations, field days, training course that educate all stakeholders on the benefits of fertilizers, thereby promoting its use.

MINAGRI and partners shall provide training for field extension agents (Farmer promoters and FFS facilitators) and provide fertilizer use guides to farmers to improve knowledge on the use of fertilizers

3.3.2.2 Fertilizer subsidies

Through its responsibility to ensure food security and livelihoods for its farmers are secured, government shall empower farmers to engage in gainful agricultural production. To this end, subsidies shall be made available to farmers to make fertilizers available and accessible at affordable prices. Government shall put in place an exit strategy from fertilizer subsidies, however, a subsidy equivalent to transport cost from the nearest sea port shall be maintained until the railroad reaches Kigali. Fertilizer subsidies shall be redirected to support farmers overcome other limitations to achieve agricultural production.

3.3.2.3 Agricultural and Rural Finance

Government, financial institutions and stakeholders shall design and implement interventions that increase access to agricultural and rural finance to facilitate access to fertilizers:

- Develop customized financial products for inputs applicable to smallholder farmers;
- Encourage financial institutions to develop units dedicated to agricultural financing;
- Foster initiatives to reduced perceived risks associated with agricultural financing, such as crop insurance, an agricultural financing fund and market linkages (warehouse receipt systems and contractual farming).

3.4 Research and Development

Research and development of fertilizer formulations/blends and fertilizer recommendations shall be the primary responsibility of government through the RAB and its research affiliates, the private sector and Universities.

Government shall commission periodic nationwide soil sampling and analyses to update the soil nutrient requirements for the various regions in the country.

Based on these soil nutrient maps RAB and partners shall periodically develop fertilizer application recommendations appropriate for the crop requirements and soil fertilizer status of these regions

Updated fertilizer recommendations shall be provided to fertilizer blenders to produce appropriate fertilizer formulations;

Since soils vary from field to field depending on topography and cropping history farmers shall be encouraged to conduct soil testing for tailor made site specific fertilizer recommendations.

Lime, organic and bio-fertilizers to compliment inorganic fertilizer use shall be encouraged to achieve an integrated approach to soil fertility management.

3.5 Environmental Sustainability and Climate Change

It is recognized that inappropriate use of fertilizers could have a negative effect on the environment such as leaching to underground water sources and the emission of “greenhouse gases”, which contributing to global warming and climate change. With respect to climate change, the inappropriate use of urea is identified as a significant source of greenhouse gas emissions. The policy shall contribute to tackling climate change, environmental safety and sustainability as follows:

- i. Farmers shall be trained on the appropriate handling and judicious use and proper application of fertilizers. Fertilizer traders shall be trained how to store, handle and transport fertilizers safely and appropriately. Awareness shall be created among value chain actors to prevent air and water pollution, soil degradation and food produce contamination due to inappropriate handling or use of fertilizers;
- ii. Soil maps shall be updated periodically to ensure changes in soil nutrient deficiencies and requirements for different crops and agro ecological zones identified to facilitate updating of fertilizer recommendations,
- iii. The use of organic and bio-fertilizers together with inorganic fertilizers shall be popularised and an integrated approach to plant nutrient management that counters soil degradation and maintains soil fertility
- iv. Establish guidelines for fertilizer manufacturers/blenders to implement environmental safety standards properly dispose of the waste products (e.g. solid wastes, effluents and fumes) emanating from its production plants.

3.6 Regulatory, standards and quality control

Government shall be responsible for regulating fertilizers to ensure that procedures are complied with and that quality fertilizer products are traded in the country. The law governing the use of Agrochemicals and the Ministerial Instructions Regulating the control of Agro chemicals, agro dealers and premises provide the legal and regulatory framework by which the fertilizer sub-sector is regulated and quality is controlled.

3.7 Governance and Institutional linkages

The lead implementer of the policy shall be MINAGRI. However, other partners shall be instrumental in the facilitating the implementation of the policy.. These partners are:

- i. Government Ministries and Agencies, including MINECOFIN, MINALOC, MINIRENA, MINIFRA, REMA, RCA, RCIA, NUR and PSF;

- ii. Local Governments (Districts)
- iii. Inter-governmental agencies (East African Community, European Union, Food and Agricultural Organization, International Fertilizer Development Center, and others),
- iv. Private sector, including input companies, agro-dealers, financial institutions, farmers, farmer cooperatives, and non-government organizations (NGOs);
- v. Development partners, including World Bank (WB), International Fund for Agricultural Development, Department for International Development, USAID, and others.

3.8 Gender

Women play a very significant contribution to agriculture. However, they have a lesser role in decision making and are disadvantaged compared to their male counterparts in benefiting from opportunities that arise for the fertilizer sub-sector (in terms of access to and use of fertilizers, and Fertilizer trade). Policies and programs in the fertilizer sub-sector shall be designed to ensure that women have a fair chance to benefit from opportunities in fertilizer extension, trade, and use.

3.9 Monitoring and Evaluation

- i. Government through MINAGRI shall develop an action plan to meet the objectives of the Fertilizer Policy, assign roles and responsibilities and provide the resources to implement the activities in the plan.
- ii. Government shall undertake internal and external monitoring of the implementation of activities of all organs and institutions in the fertilizer sub-sector to ensure where necessary the action plan is adjusted to achieve the objectives of the policy.

- iii. Government shall monitor the importation and distribution of fertilizers in order to assure effective and efficient availability and access of fertilizers. National fertilizer use and trends shall be monitored to ensure necessary interventions are implemented to ensure fertilizer use and productivity are not compromised.
- iv. Government shall ensure that all stakeholders of the Fertilizer sub-sector are involved in monitoring and evaluation processes.

3.10 Review of the Policy

The Fertilizer Policy shall be reviewed as follows:

- i. Every 2 years to ensure that policy remains relevant to the macro-economic, socio-economic and environment conditions prevailing;
- ii. The policy supports harmonization at the regional level through re-alignment to harmonized fertilizer policy at the EAC and/or COMESA region;
- iii. Government through MINAGRI will initiate the review process to meet a specific situation, for example, when there are changes to Government Policy on agriculture that have implications for the Fertilizer Policy;
- iv. Government shall ensure wide-range consultation of stakeholders in the Fertilizer Sub-sector during evaluation and review process
- v. The reviewed Fertilizer Policy shall be accompanied by updated action plans.