Report on the 2nd (Virtual) National Vegetable Roundtable

Wednesday 16th September, 2020
ZOOM Meeting hosted at GIZ MOAP Conference Room – Accra

1.0 Introduction and Conference Framework

In November 2018, the National Vegetable Roundtable was launched by FAGE with sponsorship from GIZ – Market Oriented Agriculture Programme (MOAP). This was to follow the mango roundtable's lead of knowledge sharing, networking and brainstorming on issues pertaining to the sector. Unlike the 1st, the second vegetable roundtable was hosted virtually via Zoom Conferencing due to the COVID-19 pandemic.

Participants had an open discussion on the challenges faced throughout the period of the pandemic. Presentations that formed part of the agenda for the roundtable included: List of Registered Chemicals for Vegetables; The Green Label and the Vegetable Industry; and Variety Trials on Onions.

Participation spread across various aspects of the Vegetable Value Chain including: producers (VEPEAG), inputs suppliers / service providers, certification agencies (Green Label) processors, buyers, governmental (EPA, MOTI, MOFA-DCS, MOFA-PPRSD, GEPA) organizations, academia (UG, KNUST, UCC) and development partners (GIZ – MOAP, SNV Hortifresh).

2.0 Opening Remarks

In her introductory remarks, the Chairperson Mrs. Marjorie Abdin welcomed participants and encouraged them to make the discussion a vibrant exchange.

3.0 Open Discussion – Challenges Under COVID-19

3.1 Researcher (University of Cape Coast)

It was difficult sourcing research information from farmers during the period because of safety reasons. Education through the media on how the virus is contracted, ie. By contact and getting close to people prevented the producers from welcoming researchers on to farms.

3.2 Plant Pathologist, University of Ghana

Communication with farmers became difficult during the lockdown especially farmers without smart phones to send pictures to describe the situation for diagnosis.

3.3 VEPEAG

3.3.1 Workers on most farms are not hosted in farm houses, the restricted movement during lockdown affected their access to farms to carry out their day-to-day duties.

3.3.2 Loss of products due to restricted movement (close to 350 tonnes). Also, cargo flights were unavailable during the lockdown period.

3.3.3 Increase in freight costs

3.3.4 Scarcity of labor of the fields have led increased cost of labor for operations

3.4 Plant Pathologist, University of Cape Coast

3.4.1 During the lockdown, the schools were closed hence researchers could not visit the labs to conduct research. Also, there is a strong need for academia to visit the fields (farms) when there are challenges. However, lockdown could not make that possible. Moreover, it is important to know the difference between protection officers and agronomists to call on the right person for the task at hand.

3.4.2 Colleagues (researchers/agronomists/pathologists) who visit the fields must also refrain from attempting to answer questions or suggest solutions in areas they do not have the required expertise in. Rather, recommend the right professionals for such matters.

3.5 Srighan Farms – Producer & Exporter

3.5.1 As a result of the internal ban of shallot onion exports in India, demand from the international market is very high. This is because India is the world's largest producer of shallot onions followed by Sri Lanka, and Ghana at 3rd.

3.5.2 Ghana should therefore take advantage of this opportunity to increase production of these onions thereby increasing exports to the EU and UK markets. Although Sri Lanka is the 2nd largest producer, its fair trade rate to the international markets is higher than Ghana's which is why Ghana needs to grab the opportunity with both hands.

3.5.3 In terms of size, shallots from India are bigger than those from Sri Lanka & Ghana (which are of the same size). Hence when India's ban is lifted it will be very important to get the same seed as theirs for production.

3.5.4 **Comment:** There is serious disease challenge in shallot production in Ghana and so when targeting massive nationwide production, solutions must be identified first. These include the onion bulb disease and the onion tip blight in the Central, Western and Volta regions of Ghana. Mixing the soil with neem, did work but the point to consider is how this can be done for commercial production.

4.0 Presentations

4.1 **List of Approved Chemicals for Vegetable Production / Pesticide Use in Ghana** – Presentation by Joseph Edmund (Environmental Protection Agency)

Key Highlights

4.1.1 Presently, most of the pesticides used in the country are imported as the country is yet to progress in the area of manufacturing / formulation of pesticides. Over 500 pesticides have been registered and/or approved for use in Ghana

4.1.2 In spite of progress, challenges still remain in: misuse, abuse, poisoning, residues, faking and adulteration, disposal issues, obsoletes

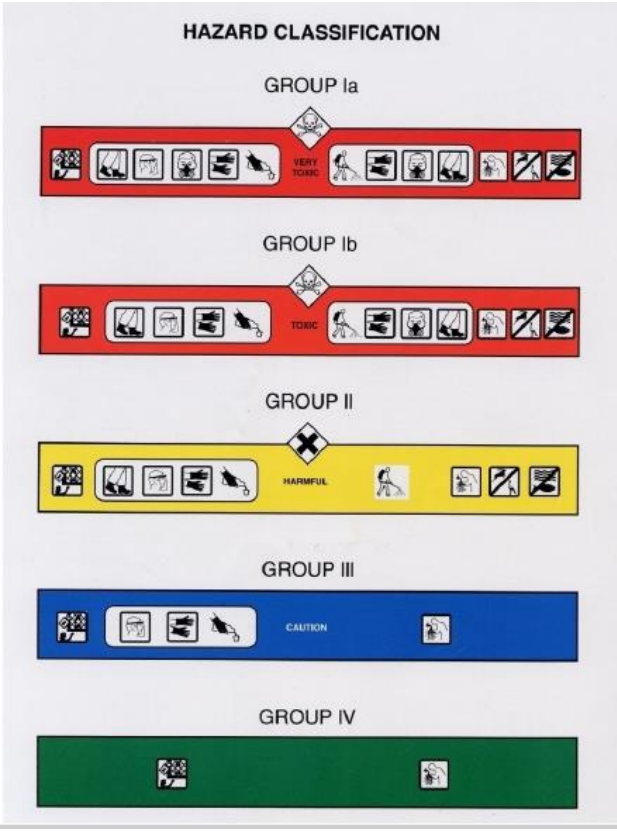

Fig. 1. Hazard classification of pesticides

4.1.3 The EPA Act (490) entreats EPA to regulate the manufacture, import, distribution and sale, export and use of pesticides. Part 1 of the EPA Act deals with environmental protection whiles Part 2 is the legal framework for control and management of pesticides in Ghana.

4.1.4 The Act defines a pesticide as a substance or mixture of substances intended for preventing, destroying, repelling or reducing the destructive effects of a pest. OR a substance or mixture of substances intended for use as a plant regulator, defoliant, desiccant or wood preservative.

4.1.5 Currently, the EPA pesticide register has 706 products and there is a total of 32 banned products.

4.1.6 Advertising & Packaging: Once the produce has been fully registered and put on the market, an alteration to its label is prohibited.

4.1.7 HAZARD = TOXICITY x EXPOSURE

It is important to manage exposure to the chemical by wearing PPEs

4.1.8 The chemicals register is updated almost every quarter within the year.

4.1.9 Comments

- Biocides (biopesticides) are also part of the register
- **Registering a chemical** = Apply to EPA by submitting required data on the toxicity, chemical properties etc. (guideline will be provided by the EPA); Efficacy trial will be conducted and authorized by the EPA; 13 member National Pesticide Committee will proceed with evaluation and make recommendations to the EPA board; Chemical is finally registered or otherwise.
- Pesticide inspectors have been appointed from both EPA and PPRSD to help farmers understand how chemicals should be used. The main concern is the inability of some farmers to read and understand labels on chemicals. In several education programs, farmers are encouraged to seek assistance from anyone who could read and explain label to them. Also, training is given to input dealers to in turn educate farmers who purchase from them. That notwithstanding, more is needed to enable farmers use chemicals more appropriately. This requires action from all stakeholders.
- Random post registration surveillance is conducted on the market to rid it of inferior chemicals that are imported after the high quality ones have passed inspection and are duly registered.
- On the chemical labels, the regulation gives room for English and one local (Ghanaian) dialect.

- The penalty aspect for breaking the EPA Act is undergoing review currently.

Revised register of pesticide as at August 2020

Category	FRE	PCL	Banned	Total
Insecticides	145	92	32	237
a. Public health	22	10	0	32
b. Stored produce	10	1	0	11
Fungicides	61	31	0	92
Herbicides	178	120	0	298
Plant Growth Regulators	8	4	0	12
Molluscicide	0	0	0	0
Rodenticides	0	0	0	0
Nematicides	2	3	0	5
Adjuvants	2	0	0	2
Biocides	5	9	0	14
Bactericide	0	1	0	1
Repellents	0	2	0	2
Total	433	273	32	706

Fig. 2: Register of pesticides as at August 2020

4.2 **The Green Label and the Vegetable Industry** – Presentation by Anthony Tamakloe (Green Label)

Key Highlights

4.2.1 The Green Label concept was birthed in 2012 at the Ministry of Food and Agriculture as a result of key issues and concerns from the market - high alerts on pests and MRLs; commingling of exported and local produce; food safety issues on the local market.

4.2.2 The Green Label is therefore system for local consumers to use in identifying safe produce from unsafe ones

4.2.3 TRAQUE supported the Green Label to develop a standard (front lined by Ghana Standard Authority) on the principles of Integrated Pest Management system, which allows the use of agrochemicals as the last resort. TRAQUE also supported the development of the Farmers' Manual (an infographic of the Green Label standard).

4.2.4 Scope of the Green Label Standard

- Production: Food Safety, Quality, Environmental Sustainability and Workers Health (GAPs)

- Processing: Traceability and systems in the pack house to check comingling
- Retail: GDP

4.2.5 The Green Label was registered as a legal entity in February 2017. It currently has 9 directors from both public and private sector as well as donor agencies and a secretary.

4.2.6 How to Get the Green Label Certificate

- Apply for certification
- Request a conformity training
- Get Audit (by SGS Ghana, Control Union & Smart Cert)
- Certification Decision
- Market linkage established

4.2.7 Current Impact

- 15 individual farmers certified (14 vegetable farmers)
- 8 farmer groups certified (representing over 250 individual farmers)
- 4 Processing Facilities packaging certified products (Eden Tree, Agri Top)
- 45,000 labels traded
- 8 Supermarkets retailing certified produce (MaxMart, Palace, Lara, Game & Fresh Market)

4.2.8 The Green Label certification to gain competitive advantage and product integrity in the AfCFTA

4.2.9 There is an e-traceability system being worked on. A manual traceability system is currently in place (match balancing) which balances the farmer's report with the processing facility's report for the market.

4.2.10 Comments (Q&A)

- Cost of certification is dependent on individual or group certification. Individual certification will be between 1,500.00 GHC – 2,500.00 GHC. A group of between 60 - 100 should be between 150.00 - 250.00 GHC per farmer.
- Orders from supermarkets for Green Label certified produce keep increasing
- The entire certification process could take a maximum of one month depending on already existing conformity systems on the farm.

4.3 **Onion Variety Trials** – Presentation by Ellen Acquaye (Hortifresh)

Key Highlights

4.3.1 The onion variety trials were conducted between September 2016 and October 2017 during Phase I of Hortifresh – GhanaVeg, with the objectives of:

- Evaluating the growth and yield of six hybrid onion varieties and two local controls in the Northern and Southern sectors of Ghana.
- Evaluating the performance of the varieties in storage.

4.3.2 Trials were conducted at 3 locations: Yemu (Northern zone), Legon (Middle zone), and Keta (Coastal zone)

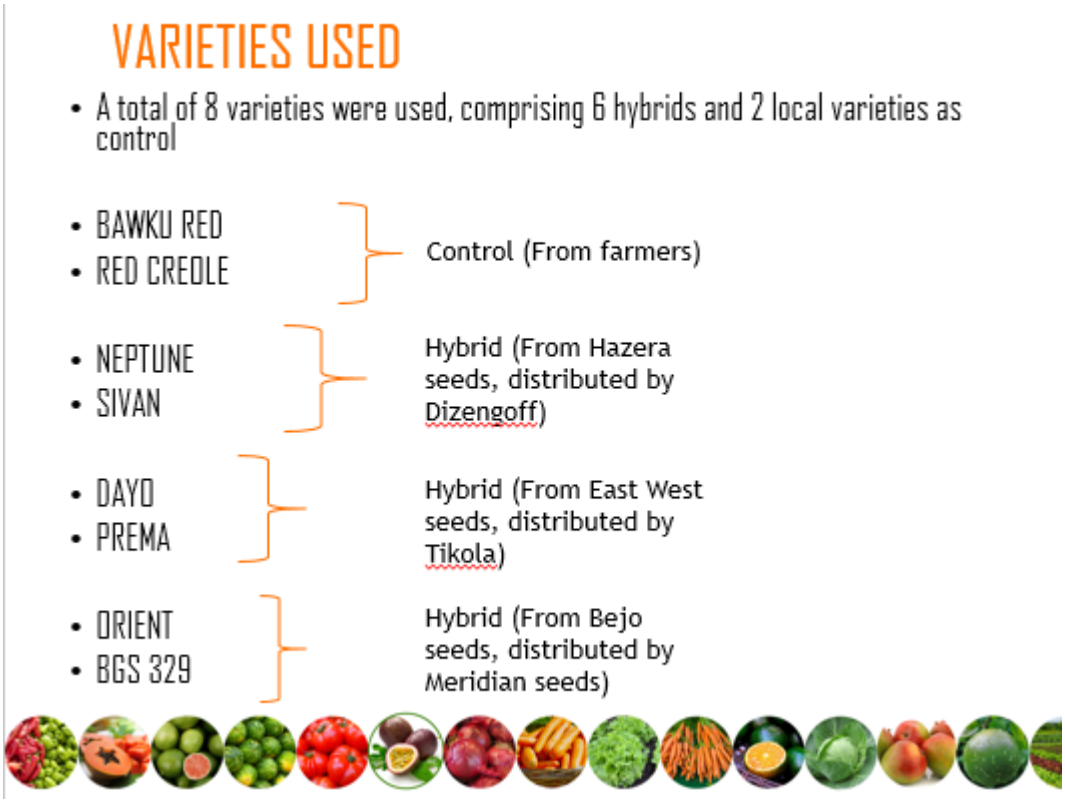

Fig. 3 Onion varieties used in the trials

4.3.3 Evaluation: Based on vigor of the crop (how well it did) on the field as well as size and color of the bulb;

- Prima came top in the Northern zone
- Neptune came top in the Middle and Coastal zones

4.3.4 Storage Experiment

- After harvesting, the bulbs were sun dried, stored and assessed for 6 months

- Neptune lost more weight than all the varieties,
- Dayo recorded the least weight loss.
- All the varieties in storage also sprouted
- Orient sprouted the most, followed by Prema
- The least sprouted was Dayo.

4.3.5 Comments

- Temperatures vary within the 3 major zones. For that matter, storage should have been done in each of the zones to actually compare and confirm.
- Records on diseases in the fields were not presented although very important.
- The storage facility is too small
- Farmers are not able to produce onions at certain times of the year. All stakeholders must come together to solve this puzzle.
- A pest and disease management guide is being worked on and will be presented later by Hortifresh.

5.0 Closing Remarks

The chairperson, Mrs. Marjorie Abdin thanked stakeholders for their active participation in the 2nd (virtual) edition of the Vegetable Roundtable. She mentioned that due to COVID-19, meetings will have to be compressed in the final quarter of the year. Although the initial plan was to have 4 vegetable roundtables in 2020, it appears only 2 can be realized, she stated. The 1st Vice President went ahead to encourage participants with any topics worth discussing to contact the FAGE secretariat. On reviewing the zoom meeting, she thought it was a very "successful, exciting with exchange of ideas, and super satisfactory".

6.0 Action Points

- FAGE to develop a platform of registered agronomists
- An application with extension officers can be developed for farmers to send pictures of happenings on the farm for advice eg. The GIZ "plantixx" App.
- HortiFresh to update a pest and disease management guide to be presented later.

6.0 Annex

Agenda

Time	Activity
9.00 – 9.30	Log in & Registration begins
9.30 – 9.40	Opening Prayer, Welcome Remarks & Introduction • ***Marjorie Q. Abdin (FAGE) & participants***
9.40 – 10.25	Open Discussion – Challenges Under COVID-19 • Farmers' perspective • Input Dealers • Regulatory bodies eg. PPRSD • Exporter / Processor • Research / Consultants
10.25 – 10.40	Presentation I – List of Approved (Registered) Chemicals for Vegetables • ***Environmental Protection Agency***
10.40 – 10.50	**Q & A**
10.50 – 11.00	***BREAK (10 minutes)***
11.00 – 11.15	Presentation II – The Green Label and the Vegetable Industry • ***Anthony Tamakloe***
11.15 – 11.25	**Q&A**
11.25 – 11.45	Presentation III – Variety Trials on Onions (yield, maturity & storage) • ***Hortifresh***
11.45 – 11.55	**Q & A**
11.55 – 12.00	**Wrap Up & Closing**