The Tomato Industry in Ghana
Applying demand-led plant breeding approaches

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Tomato production

- Tomato is one of the most important vegetables in Ghanaian diets.
- Tomatoes can be cultivated in all 10 regions, c. 367,000 tonnes on 47,000 ha (FAOSTAT 2014, Figure 1).
- Low yields of 7.5-10 ton/ha mean demand far outstrips supply, requiring heavy imports of fresh tomatoes from Burkina Faso, and puree and pastes from China and Europe (80,000 tons).

Tomato value chain

- Farmers obtain seeds from agro-input dealers or use farm-saved seeds.
- Tomatoes are handled by many people before they reach the consumer (Figure 2).

Constraints to tomato industry

- Inadequate government support
- Lack of quality germplasm for fresh and processing markets
- Insufficient numbers of trained tomato breeders
- Absence of seed laws and enabling environment
- Underdeveloped private sector and seed system
- Biotic and abiotic challenges to productivity: tomato yellow leaf curl viruses, nematodes, heat and drought stress

Tomato market segments and breeding

- WACCI has used market research to identify segments of retailers and their customers (Figure 2).
- Current public tomato breeding is focusing on only:

1. Large tomatoes for slicing and cooking
2. Small cherry tomatoes for salads
3. Mini, amber plum tomatoes for snacking

Value chain consultation workshop

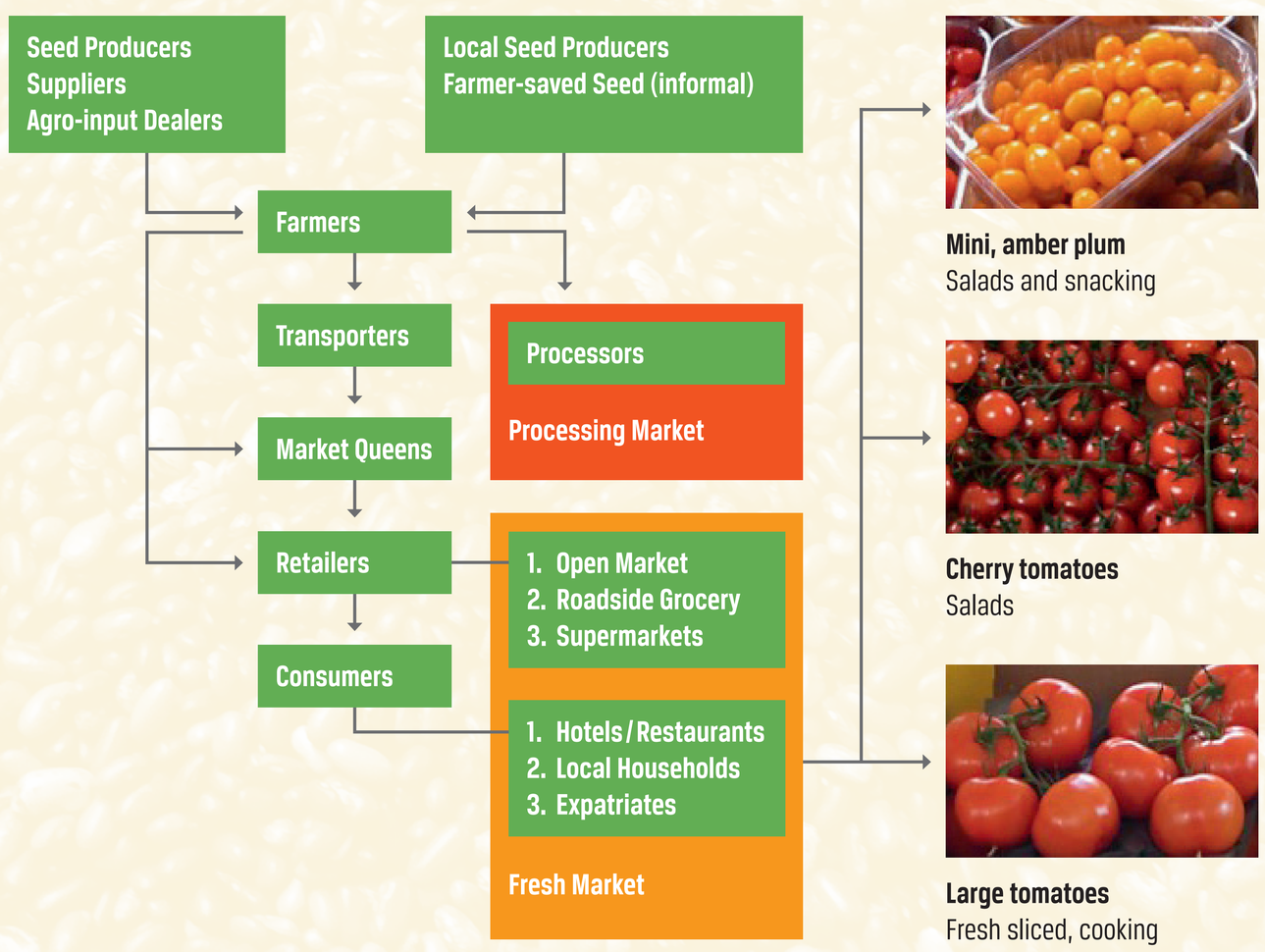
- WACCI convened Ghana's key tomato value chain representatives (Figures 3 and 4) with research scientists, government agencies, policy makers, and the international tomato industry in June 2015 to:
  - Understand the needs of each tomato value chain actor
  - Develop strategies to improve domestic production to serve households and processing markets
- An instititutional consortium was formed to support Ghana's tomato industry and guide R&D programs comprising:
  - Farmer representation
  - Processing (Nurevas Foods Ltd)
  - Government policy and enabling environment (Ministry of Agriculture, Finance and Economic Planning)
  - Seed industry (Wienco)
  - Crop research and breeding (CRI, WACCI, Uni Ghana)

Translating workshop outcomes to breeding

- Ghana's future tomato breeders studying for their PhDs at WACCI are using the contacts and outcomes to shape their research.
- They are implementing best practices in demand-led tomato breeding by:
  - Investigating existing varieties
  - Creating product profiles to meet stakeholders' needs
  - Quantifying and validating the required performance of key traits with actors in the fresh and processed tomato value chains

Figure 2

Tomato value chain and market segments



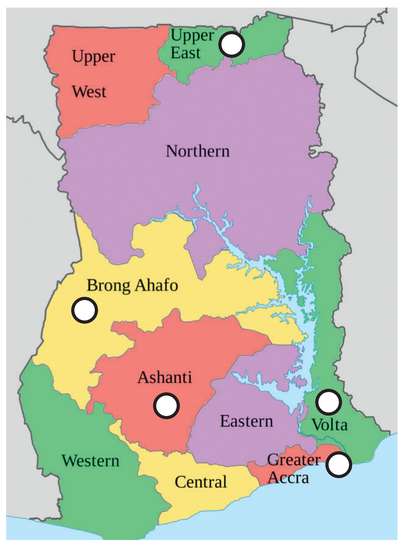


Figure 1
○ Ghana's major production regions

Figure 3 Mr Alhaji Haruna Agesheka, General Secretary of Ghana Agricultural, Producers & Traders Organisation (GAPTO) reacting to questions on tomato transportation.

Figure 4 Mr Kwabena Adu-Gyamfi, Manager of Agri-commercial Services Ltd, explaining the needs of the tomato processing industry.

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