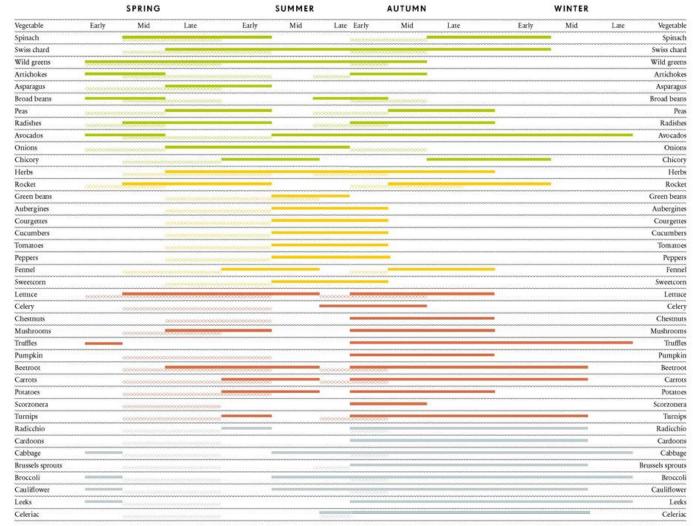


Farmers, Market Participation and Open Data



- Traditionally, farmers needed to know what to grow, when to grow, how to grow and where to grow.
- With agriculture becoming increasingly market oriented, farmers now also need to know what market, when to market, how to market and where to market in addition to many other kinds of information for successful and sustainable farming



Sow time Harvest time



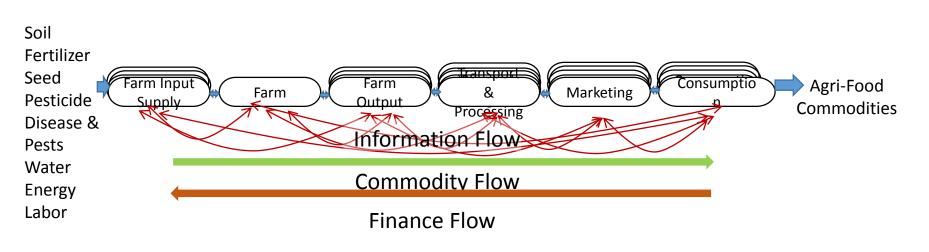
Information is now also needed by different actors, especially governments and development agencies at national, regional and global levels to meet new challenges to agriculture such as for efficient land and water use, preventing desertification, managing spread of disease and pests, managing and compensating for farm disasters such as from drought, floods etc.



Farmers, individually and collectively, themselves are both producers and users of data and information.

Information farmers' need now are sourced as data from many different sources and processed to information also by different actors. The cost of information agricultural market cha including that of labelli food safety and traceak which is now compulso market food in markets developed countries, ra between 5-25 per cent more of the cost of the product.

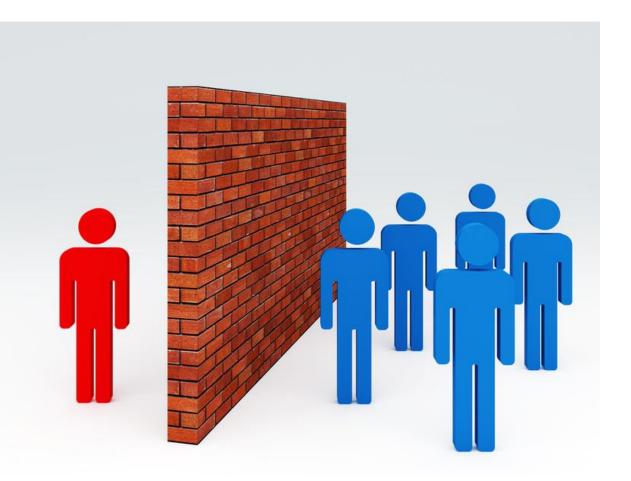


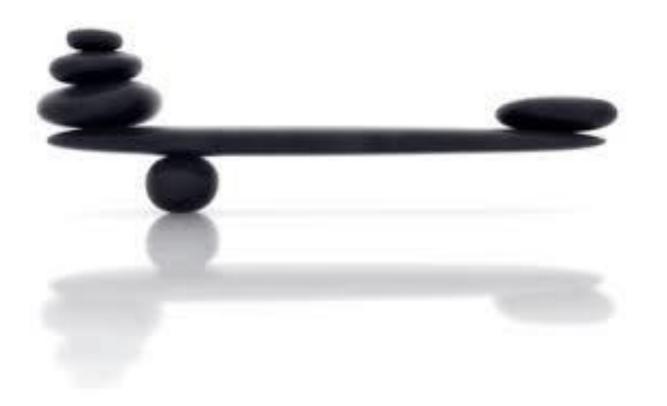


Asymmetries of information flows are a detriment for equitable and fair participation of farmers in market chains

Asymmetries of information flows in market chains for farmers result from:

- Issues related to availability, accessibility, affordability, relevance, usefulness, accuracy, precision, timeliness and trustworthiness and most important ability to effectively manage and use data and information
- Increasingly closed market chains of corporate multinational supermarkets, fast food restaurant chains and commodity traders who control information through property rights of data, information, design and use of standards and concerns of information and information systems security
- New Information and communications technologies such as Wi-fi linked farm machinery and remote sensing that obfuscate ownership of data and information, especially of farmers.



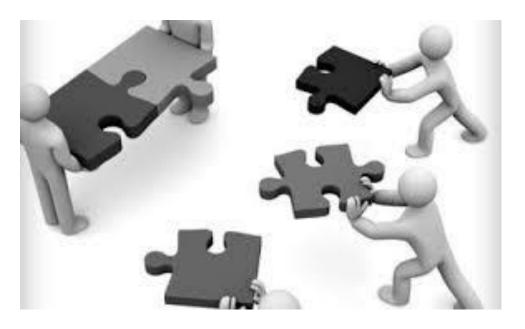


Asymmetries in information flows of market chains can be reduced by creating a global ecosystem that considers all Institutional, technology and involvement of communities issues together and holistically in the management of data globally.

Gains from opening access and use of data and information:

- Increasing the speed and spread of innovation in agriculture
- Increased global capacity to jointly meet emerging challenges to agriculture
- Increased efficiency, economy and participation of farmers, especially smallholders, in markets
- Creation of employment, especially of rural educated youth, in agriservices and agri-business





Some suggestions for farmers to effectively manage and use openly available data are:

- Implementation of policies promoting and enabling aggregation of family farmers and farming systems such as through cooperatives, producer organizations, farmer organizations etc.
- "Virtual" aggregation of farms, synchronization of farm inputs, processes, outputs and logistics to participate in markets through use of ICTs.
- Development of new forms of advisory and support systems for use of new knowledge, skills and technology
- Development of Trust Centers with Data and Information Agreements, Treaties with regulatory and enforcement mechanisms to share data at various levels and among multiple categories of users from plot, farm, farming system, region, national to global agricultural and related systems.
- New business-models that integrate governments, farmers and banks, insurance, market intermediaries, cooperatives etc. for participation in markets
- Inclusive Governance of flow of data, information, knowledge, skills and technology
- Inclusive development of standards
- Open technologies for farming and on-farm processing of farm products as also for data and information
- Increasing democratization of science, learning and support to exponential innovation
- Lowering cost of Hardware, infrastructure and connectivity

Thank You