AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Leibniz Institute of Agricultural Development in Transition Economies

Food and Agriculture Organization of the United Nations

Role of Potential RIC for Enhance of Export Potential of the Samarkand Region, Uzbekistan

Regional and International Cooperation in Central Asia and South Caucasus: Recent Developments in Agricultural Trade,
2-4 November, 2016

Shavkat Hasanov, Dr., Department of Agricultural Economics and Management, Samarkand Agricultural Institute(University)

Outline

- Introduction
- Description of agriculture in Samarkand region
  - *Problems in fruit and vegetable chain*
  - *Strategy of development of fruit and vegetable chain*
- RIC for enhancing export potential of Samarkand region
  - *KDI's agriculture projects in Uzbekistan*
  - *An expecting outcomes establish RIC in SamAI*

Introduction

- Government's recent agricultural policies towards crop diversification
  - *Legislative basis for expansion of fruit and vegetable production*
- Enhancing export potential of fruits and vegetables
  - *Orientation to global markets*
- The role of RIC

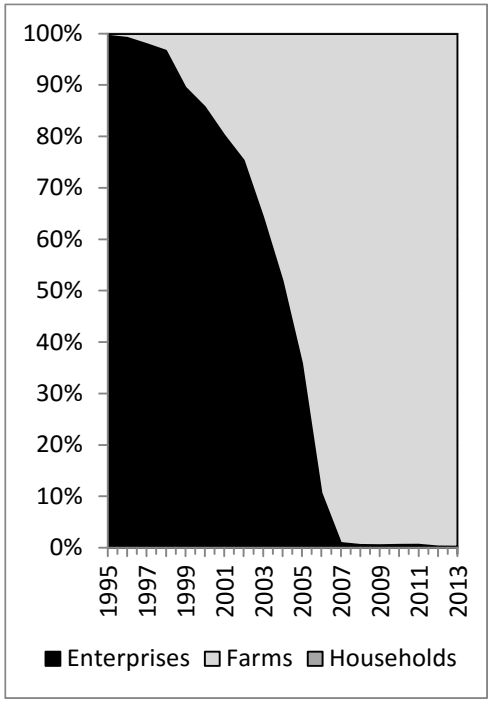
Main policies towards development of agricultural processing in Uzbekistan

- The State development program for 2011-2015 years:
  - establishment, reconstruction & modernization 232 processing plants for vegetables & grapes, with an estimated capacity of 195.0 thousand tons.
- The program focusing on **enhance of economic sustainability** of farms, efficiently use of land and water resources, invent modern technologies, a development of new industries in rural areas.
- An improvement of the **extension services and R&D** to households and farms, and processing companies
- Low interest **bank subsidies** for purchase of mini-technologies and equipment for leasing
- A create of **favorable conditions** for the processing companies:
  - tax free production 5 years for farms and dehkans, for introducing advanced technology;
- Improve **marketing infrastructure** in the domestic and foreign markets, create new jobs in rural areas

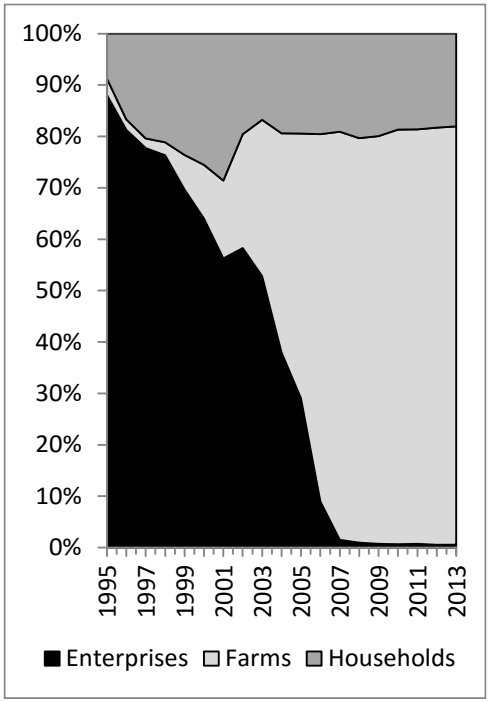
Description of agriculture in Samarkand region

Contribution of different farm categories to output

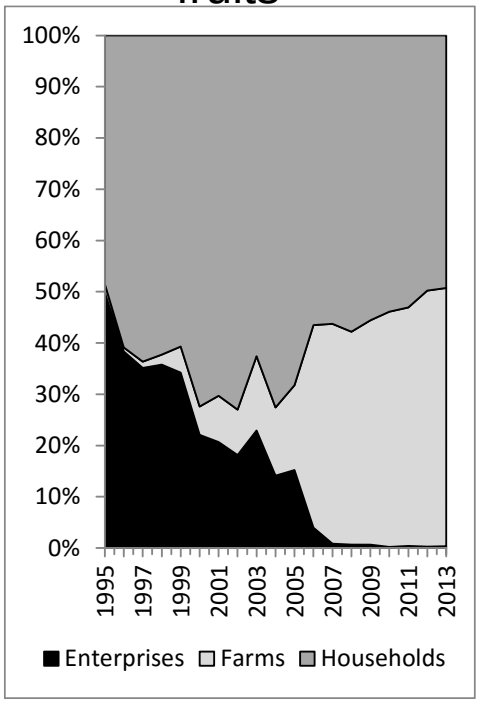
Cotton



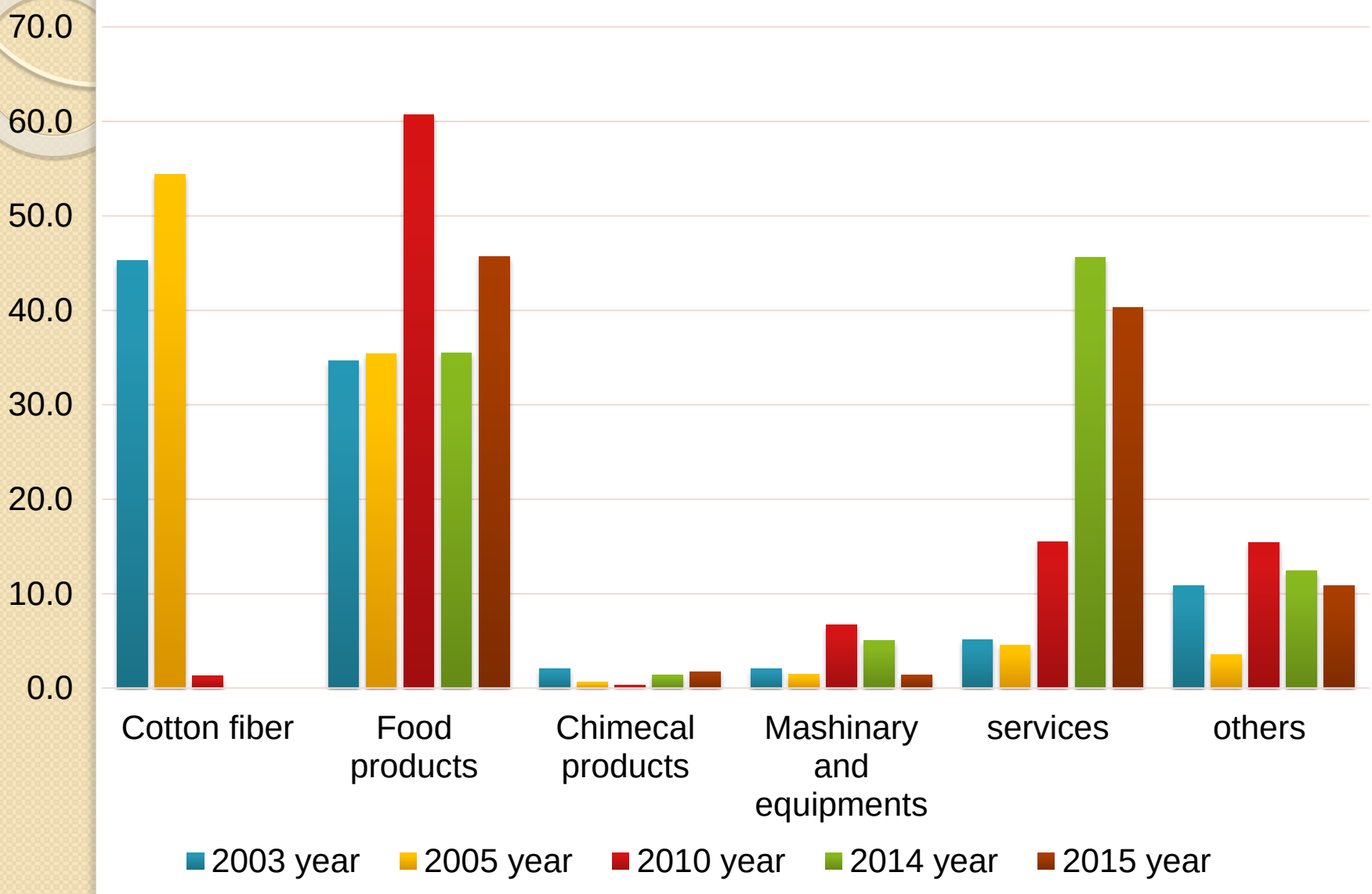
Wheat



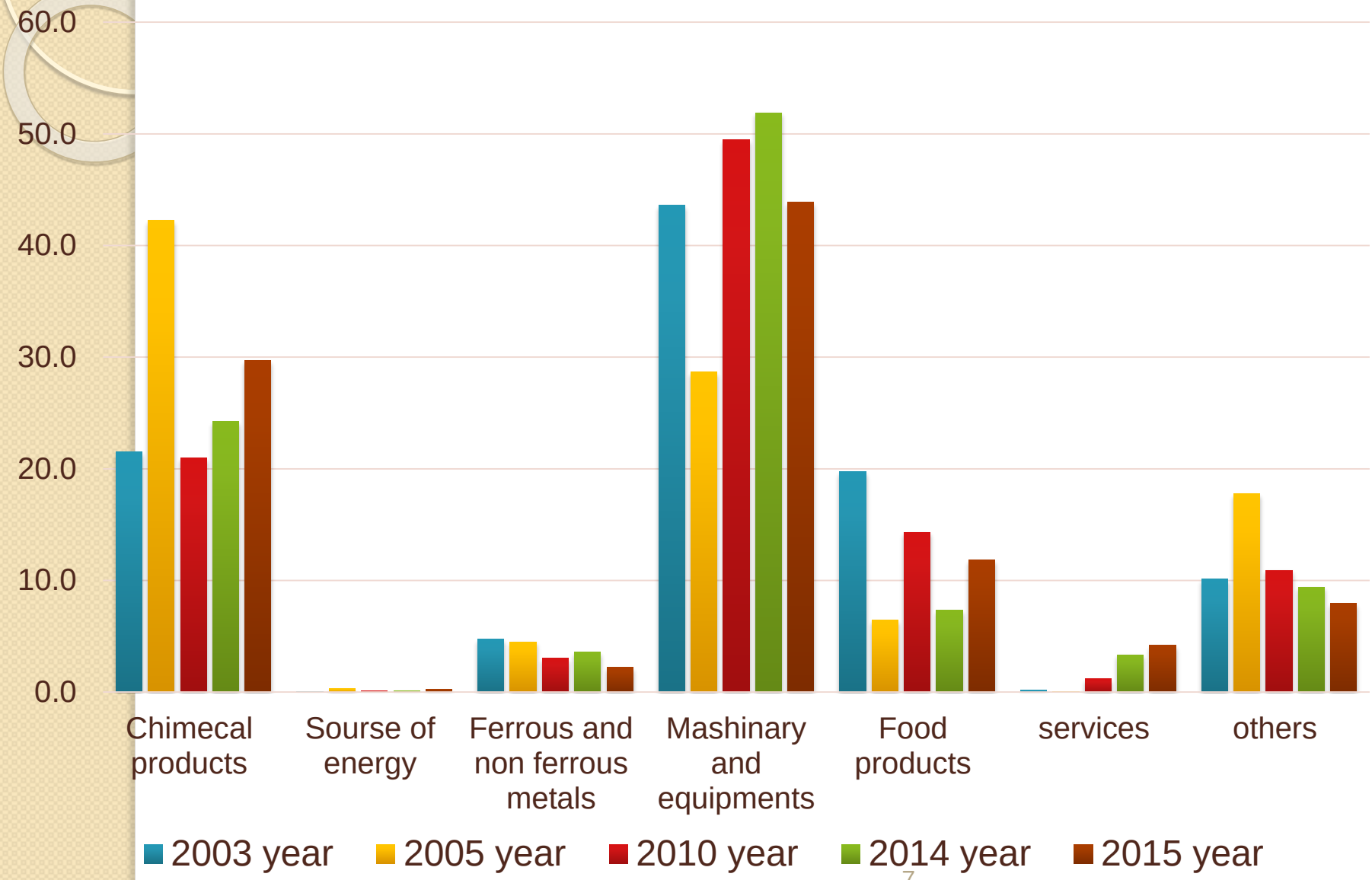
Vegetables, melons, fruits

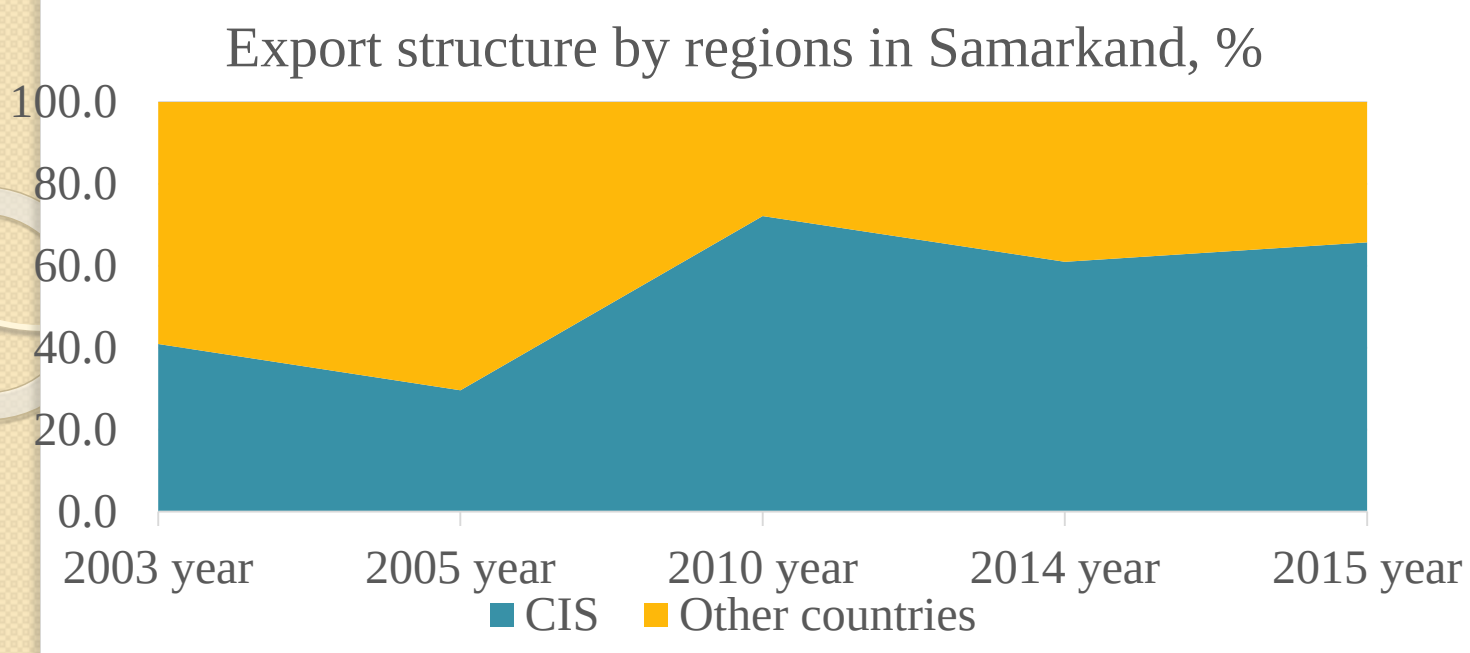


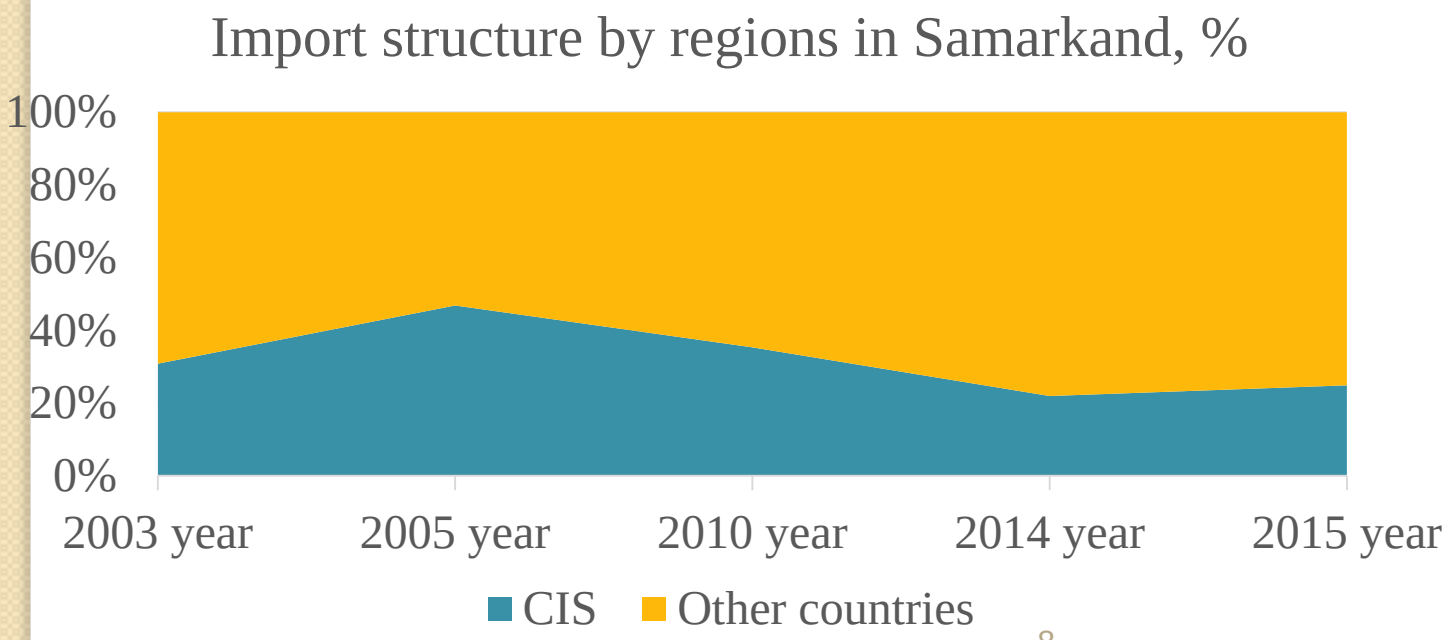
Structure of export in Samarkand region, %



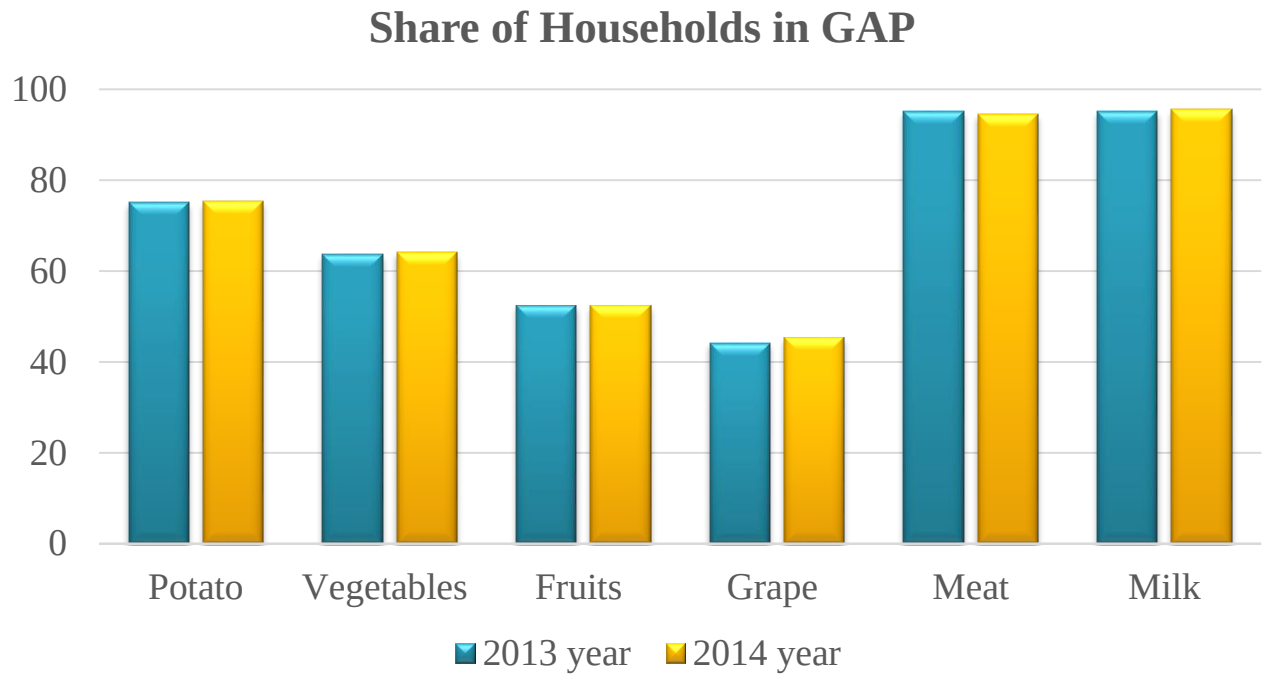
Structure of import in Samarkand region, %




Export structure by regions in Samarkand, %
100.0
80.0
60.0
40.0
20.0
0.0
2003 year
2005 year
2010 year
2014 year
2015 year
CIS
Other countries


Import structure by regions in Samarkand, %
100%
80%
60%
40%
20%
0%
2003 year
2005 year
2010 year
2014 year
2015 year
CIS
Other countries

- Dominance of household producers in HVC
- Households producing 75.3 % of potato, 64.1 % of vegetables, 52.3 % of fruits, and nearly all of meat and milk production in the country (SCS Uz., 2014)



Problems and potential solutions in fruit and vegetable chain in Samarkand region

- A small scale of fruit and vegetable farm producers with low levels of mechanization
  - *needs substantial investments for the distribution chain developed;*
  - *quality standards development*
- Unprocessed agricultural products, a lack of adequate packaging and storage facilities
  - *Surpluses and steeply falling prices in season and imported high price products off-season(e.g. apple, pear)*
- Potential solution: application of agro-food clusters, regional centers
  - *Enhance competitiveness of Samarkand's agricultural and agro-food sector,*
  - *sustainable growth of the agricultural industry and improved livelihood in rural areas*

Strategy of development of fruit and vegetable chain in Samarkand region

Channel	2015-2020	2021-2025
Production	Capacity building, linkage effects btw. units, enhance farm income, research oriented production, export oriented products	Establish Multinational companies, support agro and traditional production tourism, diversify production
Post-Harvesting	State supported warehouses, linkage effects, distribution centers, transportation and energy provision, knowledge disseminations	Establish modern distribution centers, post-harvest research centers
Processing	Research lab in Samarkand Ag.Uni., curricula development, establish processing factories, linkage effect	R&D, marketing agencies, packaging and design of export oriented products
Marketing	The issue of State program or Presidential act about clusters, Phytosanitary Center, extension services for personal	Enhance of units income, establish agro and traditional tourisms

KDI's agriculture projects in Uzbekistan

I phase

Development of Agriculture and Marketing in Uzbekistan: Korea's experience and knowledge sharing, 2012

II phase

A Pilot Study for the Development of Agro-Processing Industry Cluster in Uzbekistan, 2013

Agricultural Production, Marketing & Postharvest, Processing

I PHASE

- Overview of Uzbekistan Agriculture
- The main obstacles to the development of agriculture and marketing
- Policy recommendations for the development of agriculture and marketing in Uzbekistan
- Prospects for agriculture and marketing
- Fruits and Vegetable sector for processing industry- production infrastructure, regional locations, research and extension, marketing and trade, etc.
- Overview of Uzbekistan agro processing industry
- The main obstacles of development agricultural processing industry
- Main towards of policies for agricultural processing in Uzbekistan
- Prospects for trade and marketing of processed products

Overview of Uzbekistan agro processing industry

Regions potential clusterization coefficient of processing of main agricultural products

	Vegetables	Fruit & berries	Meat	Milk
Karakalpakistan	0,008	0,003	0,132	0,036
Andijan	**1,435**	**3,428**	0,092	**2,929**
Bukhara	0,242	0,602	0,774	0,191
Djizakh	0,088	0,072	0,927	0,369
Kashkadarya	0,143	0,102	**7,358**	**1,380**
Navoiy	0,064	0,150	**1,706**	0,278
Namangan	**1,556**	**1,770**	0,277	**1,895**
Samarkand	**23,703**	**15,901**	**1,619**	**1,612**
Surkhandarya	0,103	0,051	0,493	0,187
Syrdarya	0,024	0,004	0,098	0,069
Tashkent	**2,168**	0,347	**1,740**	0,399
Fergana	0,238	**1,020**	0,139	**1,243**
Khorasm	0,300	0,404	0,525	0,773

Source: Authors calculations

$$К_К = К_{ПМ} * К_С * К_{ПЕР} * К_{ДП}$$

Where: $К_{ПМ}$ – coefficient of production
$К_С$ – regions specialisation coefficient
$К_{ПЕР}$ - coefficient of development processing industry
Кдп – coefficient of production per capita

II PHASE

Suggested districts for Pilot Project in Samarkand

- Bulungur District:
  - **Tomato**-Processing Special Zone (Cluster)
    - Tomato: Cultivated by 2,000 ha
    - Production capacity: up to 4,000 ha

- Jomboy District:
  - **Apple**-Processing Special Zone (Cluster)
    - Apple: Cultivated by 1430 ha (300 ha new intensive orchards)
    - Production capacity: Over 300 ha
    - Low-temperature Storage: currently 15 ton capacity (5,000 ton Storage under construction)

SAI's International relations

Have a established relationships with Universities more than 40 countries of the world.
During the 2012-2014 more than 85 professors and teaching staff and 176 students have been in abroad.

1. Ongoing 3 Erasmus Mundus projects for **capacity building**:

-TOSCA *(Transfer of skills, knowledge and ideas to Central Asia);*

- eASTANA *(Eurasian starter for technical academic network application);*

- MARCO XXI

2. **Educational** projects for enhance of teaching system (4 ongoing Tempus projects):

-EPASAT *(Environmental protection Through Development and Application of Sustainable Agriculture Technologies;*

- UzWATER *(Master program in environmental sciences and sustainable development with focus on water management for Uzbekistan higher education)*

- *SAMUz(Sustainable Agrarian Management Studies for Uzbekistan)*

- *UzHELTH(Higher Education Structures to Enhance Public Health Learning and Teaching in the Republic of Uzbekistan)*

3. **Research** projects

- Feasibility study for establishing Regional Innovation Center and Educational Innovation System in Samarkand Agricultural University, Uzbekistan, National Research Foundation (NRF), Republic of Korea, 2014-2015

-Inducing change in land and labour productivity of Central Asia'a irrigated agriculture, (AGRICHANGE), 2015

4. **Other** international activities

MBA in HSWT, Germany, International Internship(Germany), Bayern Farmers Association(Germany), ROSIS - Chelyabinsk AA, DAAD…

Linkages of the SAI

- Literature review of worldwide RIC and some suitable suggestions for establishing RIC (in SAI) with respect to Uzbekistan's priorities.
- Meeting with stakeholders with several government authorities (at the Ministry of Agriculture and Water resources, Ministry of Economics, Ministry of Finance) for preparation of strategic plan for long lasting development of the University.
- Linkages between community and SAI:
- Collaboration with relevant professional colleges;
- Agribusiness sector, e.g. Farmers Union of RUz;
- Collaboration between SAI and communities(Trustees Council of SAI)
- International agreements enhance capacity building, joint research, etc.
- Collaboration between business companies, e.g. Agromir, MAN, UzBAT, Uzbegim Agro, etc.

Survey results

- Conducted survey results among academicians
- Important to further develop linkage between the community and the university activities in all three aspects such as educational, industrial and social service aspects.
- More collaboration is needed among residents, university officials and government officials.
- An establishment of a RIC at SamAI and the sharing of Korea's advanced experience on RIC, especially postharvest experience with Uzbekistan will provide multiple opportunities to enhance different actors' capacity and income in the value chain.
- e.g. A develop and enhance agro processing skills and quality control services for farmers and entrepreneurs in the province of Samarkand
- e.g.Provides business consultancy and counseling services. Training curriculum will address packaging and branding, marketing, and postharvest handling
- e.g. An address recurring problems with storage, support research and development in postharvest processing, and develop a model for small and medium warehouses suitable for small and medium-scale farmers.

An expecting outcomes establish RIC in SamAI

- Enhanced capacity of SamAI's staff /students and professors as well as farmers through trainings;
- A modernized research environment, e.g. modern food-testing laboratories, and experimental storage warehouses
- Increases production of high-quality agr. products in the region
- Improves entrepreneurship and agroprocessing skills among local processors;
- Increases value added in agriculture, especially in the fruit and vegetable subsector;
- Results-oriented and applied research (postharvest practices, harvest, grading, transportation in supply chains, etc.);
- Expansion of the domestic market and exports that contribute to farmers' income and foreign currency earnings;
- Enhanced quality of locally produced products, such as fruits and vegetables and their availability throughout the year

THANK YOU