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ALBANIAN AGRICULTURE COMPETITIVENESS PROGRAM

COMMODITY SELECTION FOR YEAR TWO

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COMMODITY SELECTIONFOR YEAR TWO

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I. Introduction

The AAC program aims to stimulate growth in Albania's agricultural sector, which will contribute to achieving sustained, broad-based economic growth and poverty reduction in targeted rural areas. This is being achieved by providing technical assistance and training to producers and other value chain actors to improve productivity and competitiveness. AAC objectives are being reached by a) building producer capacity to increase farm-level productivity, cost competitiveness, and post-harvest management; b) strengthening market development capacity in order to tie production to viable market opportunities, and c) improving access to and use of accurate and timely marketing information. AAC is therefore supporting Albanian agribusinesses to meet the challenges brought about by rapid changes in the requirements of the domestic and export markets, through a comprehensive and system-wide strategy that integrates a set of interventions framed within the program's three core components.

Within this context, AAC supports the growth of strategic value chains, i.e. those with the highest likelihood to promote sustained and broad-based economic growth. During its first year of implementation, the program supported input suppliers, farmers and farmer associations, processors and traders linked to four value chains, namely: greenhouse vegetables, apples, olives and early-season watermelons.

As the project goes into its second year of implementation, and according to the terms of the task order, there is need to identify and select three more strategic value chains to be supported 2009 onwards. AAC will select these new value chains based on four fundamental criteria:

1. Market prospects
2. Competitiveness
3. Prospects for economic growth
4. Feasibility within the life of project

Using these criteria is relevant because: a) project resources will be maximized by supporting subsectors with clear market potential, which will consequently introduce incentives for the sustainability of the value chains, b) current and potential capacity to compete in target markets will determine the ability of the different actors of the value chains to not only penetrate, but also sustain a position in those markets; with profitability as a major element, c) consistent with the overarching strategic objectives of USAID Albania, foreign aid should target subsectors with the highest likelihood to contribute to economic growth, and d) the project should give priority to those value chains that can be sustainable, profitable and independent by the end of its implementation phase.

Based on these premises, this document presents a summary analysis of several subsectors that where identified by clients, partner organizations and AAC's experts as meeting the aforementioned criteria. These include onions, potatoes, crucifer crops (e.g. broccoli, cauliflower and cabbage), carrots and tangerines.

While precise to the extent to which available data allowed, the analysis presented in this document is not exhaustive in nature; it rather constitutes the basis for the selection of value chains, which will be further studied through value chain assessments.

The latter will lead to the design of production and marketing strategies for each of the commodities selected.

Within this framework, this document will first discuss the selection criteria and methods, followed by the discussion of findings, a subsector ranking matrix and conclusions in the form of a list of priority subsectors to be further studied and supported by the program. The document concludes with a summary of next steps.

II. Selection criteria and methodology

The selection of strategic subsectors is based on their ranking when viewed through the lens of four basic categories of criteria to assess their prospects for market expansion, competitiveness, economic growth and the feasibility of realizing concrete results within the life of the project.

Figure 1 Criteria for analysis

Market Prospects	Competitiveness	Prospects for economic growth	Feasibility
▪ Opportunities for import substitution ▪ Export potential within the region ▪ Export potential to the EU	▪ Profitability ▪ Post-harvest infrastructure ▪ Prospects for differentiation ▪ Forward and backward linkages	▪ Economic relevance of the subsector ▪ Opportunities for expansion ▪ Barriers to entry	▪ Willingness to adapt by changing practices ▪ Ability to produce results within desired timeframe ▪ Private sector buy-in

Each of the proposed subsectors will be ranked according to a particular weight; i.e. a weight assigned to each criterion based on experts' knowledge. The measurements of each criterion consist of either qualitative or quantitative scores, the sum of which will determine the subsectors to be included in AAC's program activities.

Table 2. Scoring categories

	Selection Criteria	Description	Measurement	Type of variable and Weighting
Market Prospects	Opportunities for import substitution	Size and rate of change of the gap between domestic production and total domestic supply	Historical domestic disappearance models Trends of imports and per-capita consumption	Quantitative 10%
	Export potential within the region	Unsatisfied demand in key markets of the Balkan region	Volume and value of imports	Quantitative 10%
	Export potential to the EU	Volume and value of unsatisfied demand in key markets of the European Union	Volume and value of imports	Quantitative 10%

	Selection Criteria	Description	Measurement	Type of variable and Weighting
Competitiveness	Profitability	Benefit/cost ratio across seasons	Average expected profit calculated using temporal parity price models	Quantitative 10%
	Post-harvest infrastructure	Availability (or not) of post-harvest infrastructure required to handle and/or process the commodity	Nominal response depending on the number of value-adding steps for which the country has installed capacity	Quantitative 10%
	Prospects for differentiation	Possibilities to benefit from unique attributes of the commodity to enter market niches	Nominal (qualitative) measure based on market observations	Qualitative 5%
	Forward and backward linkages	Existence of input suppliers, traders and/or processors to establish coordinated supply chains	Nominal (qualitative) measure based on field observations	Qualitative 5%
Prospects for economic growth	Economic relevance of the subsector	Current dimension of the subsector	Number of farmers engaged in and hectares grown to production of the commodity	Quantitative 10%
	Opportunities for expansion	Growth potential	Existence of factors of production (land, labor and capital) in the scale required to accomplish significant growth	Qualitative 5%
	Barriers to entry	Existence, or not of economic, political or institutional barriers preventing the participation of more firms in the value chains	Nominal (qualitative) measure of accessibility based on field observations and experts' opinions	Qualitative 5%
Feasibility	Willingness to adapt by changing practices	Flexibility of firms and individuals to change current production practices	Measure of the proportion of entrepreneurs willing to make substantial changes to meet production and market requirements	Qualitative 5%
	Ability to produce results within desired timeframe	Likelihood of achieving the objective of the project (i.e. improving the competitiveness of the value chain) before July 2012	Qualitative assumption of the probability of achieving the program objectives within the give timeframe	Qualitative 5%
	Private sector buy-in	Interest of the value chain actors to engage in relatively risky endeavors to realize the productive potential of their enterprises	Qualitative assumptions based on field interviews	Qualitative 10%

III. Findings

3.1 Market Prospects

Consistent with the value chain approach, markets—and most importantly clear market opportunities constitute the starting point for the development of the agricultural value chains. Within this context AAC will evaluate the relative market potential of the commodities under consideration, by looking at existing and potential market opportunities in the domestic, regional and international marketplaces. In the latter case, the emphasis will be on the major markets in the European Union.

- **Opportunities for import substitution.** The analysis of the potential in the domestic market is analyzed using domestic disappearance models, based on time series data for the period 2003-2007. This allows measuring the average rate of change of imports, as well as average rate of change in per capita consumption, both of which provide a reasonable indication of the prospects for Albanian producers to supply the domestic market and substitute exports.

Table 3. Domestic Disappearance Model for Potatoes, 2003-2007

Year	Production	Imports	Ph Loses	Exports	Total Supply	Per Capita Consumption
	MT	MT		MT	MT	kg/per person
2003	158,200	18,140	n/a	4	176,336	57.8
2004	159,800	26,666	n/a	1	186,465	60.9
2005	169,300	1,583	n/a	4	170,879	55.8
2006	162,600	1,225	n/a	4	163,821	52.8
2007	154,900	5,905	n/a	65	160,740	51.9

Year	$Imp/Supply_t$ ratio
2004-2007	4.9%
2004	14.3%
2005	0.9%
2006	0.7%
2007	3.7%

Year	PCC Rate of Change
2003-2007	-2.6%
2004	5.4%
2005	-8.4%
2006	-5.4%
2007	-1.9%

Table 4. Domestic Disappearance Model for Crucifer Crops, 2003-2007

Year	Production	Imports	Ph Loses	Exports	Total Supply	Per Capita consumption
	MT	MT		MT	MT	kg/per person
2003	40,000	180	n/a	351	39,829	13.1
2004	43,700	37	n/a	202	43,535	14.2
2005	44,300	62	n/a	224	44,138	14.4
2006	38,330	87	n/a	674	37,743	12.2
2007	38,200	75	n/a	63	38,212	12.3

Year	$Imp/Supply_t$ ratio
2004-2007	0.2%
2004	0.1%
2005	0.1%
2006	0.2%
2007	0.2%

Year	PCC Rate of Change
2003-2007	-1.0%
2004	8.9%
2005	1.4%
2006	-15.6%
2007	1.2%

Table 5. Domestic Disappearance Model for Onions, 2003-2007

Year	Production	Imports	Ph Loses	Exports	Total Supply	Per Capita consumption
	MT	MT		MT	MT	kg/per person
2003	51,000	7,007	n/a	6.1	58,001	19.0
2004	50,000	6,309	n/a	n/a	56,309	18.4
2005	52,000	4,341	n/a	8.2	56,333	18.4
2006	61,691	4,853	n/a	2.6	66,541	21.5
2007	62,000	5,317	n/a	1.7	67,315	21.7

Year	$Imp/Supply_t$ ratio
2004-2007	8.5%
2004	11.2%
2005	7.7%
2006	7.3%
2007	7.9%

Year	PCC Rate of Change
2003-2007	3.6%
2004	-3.2%
2005	0.0%
2006	16.6%
2007	1.2%

Table 6. Domestic Disappearance Model for Carrots, 2003-2007

Year	Production	Imports	Ph Loses	Exports	Total Supply	Per Capita consumption
	MT	MT		MT	MT	kg/per person
2003	3,500	38	n/a	n/a	3,538	1.2
2004	3,800	17	n/a	n/a	3,817	1.2
2005	4,000	140	n/a	n/a	4,140	1.4
2006	1,268	14	n/a	n/a	1,282	0.4
2007	1,300	75	n/a	n/a	1,375	0.4

Year	$Imp/Supply_t$ ratio
2004-2007	1.5%
2004	1.1%
2005	0.4%
2006	3.4%
2007	1.1%

Year	PCC Rate of Change
2003-2007	-11.6%
2004	7.5%
2005	8.5%
2006	-69.4%
2007	7.2%

Table 7. Domestic Disappearance Model for Tangerines, 2003-2007

Year	Production	Imports	Ph Loses	Exports	Total Supply	Per Capita consumption
	MT	MT		MT	MT	kg/per person
2003	n/a	4,345	n/a	n/a	4,345	1.4
2004	760	6,909	n/a	n/a	7,669	2.5
2005	900	10,780	n/a	n/a	11,680	3.8
2006	1,070	10,376	n/a	n/a	11,446	3.7
2007	1,100	9,980	n/a	n/a	11,080	3.6

Year	$Imp/Supply_t$ ratio
2004-2007	90.8%
2004	90.1%
2005	92.3%
2006	90.7%
2007	90.1%

Year	PCC Rate of Change
2003-2007	30.4%
2004	75.9%
2005	52.3%
2006	-3.3%
2007	-3.2%

Table 8. Commodity Scoring Matrix based on Prospects for Import Substitution

		Potatoes	Crucifer Crops	Onions	Carrots	Tangerines
Average Imp/S_t ratio	Value	4.9	0.2	8.5	1.5	90.8
	Conv factor	0.05				
	Score	0.23	0.01	0.40	0.07	4.29
Change in PCC	Value	-2.6	-1	3.6	-11.6	30.4
	Conv factor	0.15				
	Score	n/a	n/a	0.53	n/a	4.47
Total Score		**0.23**	**0.01**	**0.93**	**0.07**	**8.76**

- **Export potential in the region.** Regional market prospects are evaluated by comparing import trends for each of the target commodities in major markets, including Bosnia Herzegovina, Macedonia, Serbia and Croatia[1]. These data provide an indication of both the dimension and rate of growth of markets for crops of interest. However, considering that the size of these markets is considerably beyond Albania's production potential, the scores will be assigned solely on basis of the growth rate of demand.

Table 9. Volume and Value of Regional Potato Imports, 2003-2007

	Bosnia Herzegovina		Macedonia		Serbia		Croatia		Total	
Year	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
	MT	USD	MT	USD	MT	USD	MT	USD	MT	USD
2003	13,303	4,098,603	4,282	1,320,426	n/a	n/a	64,459	17,242,699	82,044	22,661,728
2004	28,133	6,868,715	10,040	2,877,591	n/a	n/a	54,175	17,825,600	92,348	27,571,906
2005	14,627	4,766,039	1,075	712,634	4,266	1,786,242	25,563	8,889,750	45,530	16,154,665
2006	16,054	5,959,052	1,161	780,173	7,631	3,556,105	35,614	14,161,976	60,460	24,457,306
2007	16,368	7,241,532	2,135	1,604,335	6,240	4,052,198	25,969	13,522,149	50,712	26,420,214

Year	Rate of Change of Imports
2003-2007	9.9%
2004	21.7%
2005	-41.4%
2006	51.4%
2007	8.0%

Table 10. Volume and Value of Regional Crucifer Crops Imports, 2003-2007

	Bosnia Herzegovina		Macedonia		Serbia		Croatia		Total	
Year	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
	MT	USD	MT	USD	MT	USD	MT	USD	MT	USD
2003	624	240,793	21	7,593			8,984	2,859,590	9,629	3,107,976
2004	2,864	450,835	154	25,173			2,679	1,588,552	5,697	2,064,560
2005	2,912	825,969	36	9,712	4,938	1,214,918	4,410	2,649,867	12,296	4,700,466
2006	3,739	1,147,251	69	23,669	6,804	1,759,408	4,250	2,496,127	14,862	5,426,455
2007	2,892	664,677	107	15,660	6,523	1,381,862	3,463	2,700,587	12,985	4,762,786

Year	Rate of Change of Imports
2003-2007	24.3%
2004	-33.6%
2005	127.7%
2006	15.4%
2007	-12.2%

[1] While Montenegro and Kosovo also constitute potential markets for Albanian commodities, they were not included in the analysis due to a lack of reliable data.

Table 11. Volume and Value of Regional Onion Imports, 2003-2007

	Bosnia Herzegovina		Macedonia		Serbia		Croatia		Total	
Year	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
	MT	USD	MT	USD	MT	USD	MT	USD	MT	USD
2003	3,017	689,004	304	168,674			18,592	5,087,317	21,913	5,944,995
2004	7,806	1,888,239	902	257,305			14,311	5,153,811	23,019	7,299,355
2005	6,701	2,560,746	635	231,678	4,426	1,521,399	11,980	3,334,798	23,743	7,648,621
2006	5,313	2,080,093	161	107,367	7,372	2,218,219	12,381	4,498,262	25,226	8,903,941
2007	6,169	2,518,240	184	216,937	5,480	2,851,127	14,008	6,814,596	25,841	12,400,900

Year	Rate of Change of Imports
2003-2007	20.8%
2004	22.8%
2005	4.8%
2006	16.4%
2007	39.3%

Table 12. Volume and Value of Regional Carrot Imports, 2003-2007

	Bosnia Herzegovina		Macedonia		Serbia		Croatia		Total	
Year	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
	MT	USD	MT	USD	MT	USD	MT	USD	MT	USD
2003	1,632	448,823	274	52,698			9,069	3,072,771	10,975	3,574,292
2004	3,238	603,395	74	13,267			8,018	2,827,097	11,330	3,443,759
2005	2,981	860,945	242	47,848	2,136	422,504	7,748	2,732,315	13,106	4,063,612
2006	4,790	1,124,494	397	79,486	3,836	768,303	7,909	3,446,099	16,932	5,418,382
2007	2,651	833,513	149	40,698	1,198	271,035	8,624	3,272,818	12,621	4,418,064

Year	Rate of Change of Imports
2003-2007	7.3%
2004	-3.7%
2005	18.0%
2006	33.3%
2007	-18.5%

Table 13. Volume and Value of Regional Tangerine Imports, 2003-2007

	Bosnia Herzegovina		Macedonia		Serbia and Montenegro		Croatia		Total	
Year	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
	MT	USD	MT	USD	MT	USD	MT	USD	MT	USD
2003	7,808	2,935,559	4,114	1,768,039	n/a	n/a	1,706	1,488,166	13,628	6,191,764
2004	12,903	3,782,679	6,409	3,080,944	15,661	9,498,830	2,179	1,539,041	21,491	17,901,494
2005	15,282	5,803,019	5,656	2,540,528	14,689	7,400,362	4,366	2,580,908	25,304	18,324,817
2006	17,839	6,989,489	6,006	2,886,864	20,710	11,582,592	4,379	2,622,169	28,224	24,081,114
2007	14,106	6,597,864	6,085	3,699,727	25,031	18,138,003	4,781	3,596,934	24,972	32,032,528

Year	Rate of Change of Imports
2003-2007	64.0%
2004	189.1%
2005	2.4%
2006	31.4%
2007	33.0%

Table 14. Commodity Scoring Matrix based on Regional Market Potential

		Potatoes	Crucifer Crops	Onions	Carrots	Tangerines
Growth rate of regional imports	Value	9.9	24.3	20.8	7.3	64
	Conv factor	0.08				
	Score	**0.78**	**1.92**	**1.65**	**0.58**	**5.07**

- **Export potential to the EU.** Markets in the European Union constitute a major opportunity for Albanian farmers, due to three fundamental reasons: geographic proximity, dimension of market demand, as well demand's rate of growth. Therefore the export potential to the European Union is measured based on import/supply ratio for the crops subject of this study, as well as the average rate of change in demand.
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Table 15. Export Potential for Potatoes to the EU.

Year	Production	Imports	Exports	Total Supply	Per Capita Consumption
	MT	MT	MT	MT	kg/per person
2003	63,563,125	398,748	1,080,789	62,881,084	126.0
2004	71,113,005	589,557	856,989	70,845,573	142.0
2005	62,451,653	603,791	895,912	62,159,532	124.6
2006	56,823,349	550,366	925,959	56,447,755	113.1
2007	61,993,613	602,901	941,591	61,654,922	123.6

Year	$Imp/Supply_t$ ratio
2003-2007	0.9%
2003	0.6%
2004	0.8%
2005	1.0%
2006	1.0%
2007	1.0%

Percent growth in demand over the last 5 years
-1.95%

Table 16. Export Potential for Crucifer Crops to the EU.

Year	Production	Imports	Exports	Total Supply	Per Capita Consumption
	MT	MT	MT	MT	kg/per person
2003	8,454,932	21,641	69,172	8,407,402	16.9
2004	8,235,648	18,659	90,014	8,164,294	16.4
2005	8,013,053	25,650	168,358	7,870,345	15.8
2006	7,837,648	22,203	105,709	7,754,142	15.5
2007	7,818,145	45,422	151,391	7,712,175	15.5

Year	$Imp/Supply_t$ ratio
2003-2007	0.3%
2003	0.3%
2004	0.2%
2005	0.3%
2006	0.3%
2007	0.6%

Percent growth in demand over the last 5 years
-8.27%

Table 17. Export Potential for Onions to the EU.

Year	Production	Imports	Exports	Total Supply	Per Capita Consumption
	MT	MT	MT	MT	kg/per person
2003	4,985,642	318,038	456,558	4,847,122	9.7
2004	6,001,902	322,391	484,757	5,839,535	11.7
2005	5,422,060	232,193	579,910	5,074,343	10.2
2006	5,282,124	289,375	553,889	5,017,610	10.1
2007	5,234,707	442,205	420,944	5,255,967	10.5

Year	$Imp/Supply_t$ ratio
2003-2007	6.2%
2003	6.6%
2004	5.5%
2005	4.6%
2006	5.8%
2007	8.4%

Percent growth in demand over the last 5 years
8.43%

Table 18. Export Potential for Carrots to the EU.

Year	Production	Imports	Exports	Total Supply	Per Capita Consumption
	MT	MT	MT	MT	kg/per person
2003	5,477,561	36,606	69,053	5,445,114	10.9
2004	5,970,283	25,415	63,187	5,932,510	11.9
2005	5,985,924	37,940	81,577	5,942,287	11.9
2006	5,995,238	43,382	76,111	5,962,509	12.0
2007	6,130,951	53,045	85,860	6,098,136	12.2

Year	$Imp/Supply_t$ ratio
2003-2007	0.7%
2003	0.7%
2004	0.4%
2005	0.6%
2006	0.7%
2007	0.9%

Percent growth in demand over the last 5 years
11.99%

Table 19. Export Potential for Tangerines to the EU.

Year	Production	Imports	Exports	Total Supply	Per Capita Consumption
	MT	MT	MT	MT	kg/per person
2003	2,776,409	324,136	187,929	2,912,616	5.8
2004	3,287,593	347,098	179,139	3,455,552	6.9
2005	2,820,028	371,391	224,781	2,966,637	5.9
2006	3,561,492	370,425	231,971	3,699,946	7.4
2007	3,020,112	289,102	342,438	2,966,776	5.9

Year	$Imp/Supply_t$ ratio
2003-2007	10.7%
2003	11.1%
2004	10.0%
2005	12.5%
2006	10.0%
2007	9.7%

Percent growth in demand over the last 5 years
1.86%

Table 20. Commodity Scoring Matrix based on Market Potential to the EU

	Potatoes	Crucifer Crops	Onions	Carrots	Tangerines
Avg import/supply ratio	0.90%	0.30%	8.40%	1.70%	10.70%
Coversion factor	0.23				
Score 1	0.205	0.068	1.909	0.386	2.432
Demand growth	-1.95%	-8.27%	8.43%	11.99%	1.86%
Conversion factor	0.224				
Score 2	0.000	0.000	1.892	2.691	0.417
Total Score	**0.205**	**0.068**	**3.801**	**3.077**	**2.849**

3.2 Competitiveness

The relative competitiveness of the commodities subject to analysis will be assessed based on several factors that determine whether or not they can succeed in penetrating and progressively gaining market share in the domestic, regional and international markets.

- **Profitability.** Profitability constitutes the single most important factor determining farmers' and traders' willingness to engage in the production and trade of a commodity. Because profitability is determined by the relationship between market prices and production and marketing costs, it is directly associated to the efficiency of the value chain. Considering that profitability changes across markets and across seasons, the analysis below is based on different measures of efficiency in an attempt to make the best possible use of available data. In the case of the domestic market, the relative profitability of the commodities in question is compared based on the "domestic-to-import price ratio", which compares the price of domestically grown commodities with the landed price of similar imported commodities across seasons. The purpose of using this price ratio is to measure the existing gap among the price for domestic and imported produce, which denotes potential gains for domestic producers, should they meet consumers' requirements.

  Similarly, for the analysis of relative profitability in the regional and international markets this study uses "temporal Export Parity Price Analysis[2]" (TEEP), which provides an indication of the profitability of similar commodities in different markets across seasons. Considering the potential benefits of selling to the European Union, both in terms of volumes and prices, the TEEP analysis uses data from three potential business partners, i.e., Germany, United Kingdom and Bulgaria, which according to industry experts constitute feasible and lucrative destinations for Albanian produce.

[2] Estrada-Valle, 2009.

Table 21 Domestic to Imported Produce Price Ratio for Potatoes for CY2007. All prices in Albanian Leke

Potatoes	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Annual AVG
Average Wholesale Price for Domestic Produce	41.0	39.0	39.0	44.0	42.0	36.0	32.0	34.0	36.0	38.0	40.0	41.0	**38.50**
Average Wholesale Price for Imported Produce	114.0	113.0	117.0	117.0	121.0	148.0	141.0	133.0	144.0	145.0	152.0	150.0	**132.92**
Price Ratio Domestic/Imports	0.36	0.35	0.33	0.38	0.35	0.24	0.23	0.26	0.25	0.26	0.26	0.27	**0.29**

Table 22 Domestic to Imported Produce Price Ratio for Dry Onions for CY2007. All prices in Albanian Leke

Onion	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Annual AVG
Average Wholesale Price for Domestic Produce	41	43	47	54	0	0	31	33	35	38	41	44	**40.70**
Average Wholesale Price for Imported Produce	41	44	49	62	55	50	41	36	35	37	41	49	**43.50**
Price Ratio Domestic/Imports	1.00	0.98	0.96	0.87	----	----	0.76	0.92	1.00	1.03	1.00	0.90	**0.94**

Harvest season **Stored produce**

Table 23 Domestic to Imported Produce Price Ratio for Carrots for CY2007. All prices in Albanian Leke

Carrots	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Annual AVG
Average Wholesale Domestic Price	49	49	54	76	92	79	85	72	74	72	56	45	**66.92**
Average Wholesale Imported Price	70	77	58	60	103	79	83	80	75	85	77	60	**75.58**
Price Ratio Domestic/Imports	0.70	0.64	0.93	1.27	0.89	1.00	1.02	0.90	0.99	0.85	0.73	0.75	**0.89**

Table 24 Domestic to Imported Produce Price Ratio for Crucifer Crops for CY2007. All prices in Albanian Leke

Crucifer Crops	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Annual AVG
Average Wholesale Domestic Price	78	41	66	127	108	137	143	163	178	108	73	77	**108.25**
Average Wholesale Imported Price	106	65	79	151	128	130	150	150	155	135	120	108	**123.08**
Price Ratio Domestic/Imports	0.74	0.63	0.84	0.84	0.84	1.05	0.95	1.09	1.15	0.80	0.61	0.71	**0.85**

Harvest season **Stored produce**

Table 25 Domestic to Imported Produce Price Ratio for Tangerines for CY2007. All prices in Albanian Leke

Tangerine	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Annual AVG
Average Wholesale Domestic Price	83	0	0	0	0	0	0	0	180	90	77	75	**101.00**
Average Wholesale Imported Price	83	94	115	141	140	0	0	190	173	109	84	83	**106.40**
Price Ratio Domestic/Imports	1.00	----	----	----	----	----	----	----	1.04	0.83	0.92	0.90	**0.94**

Harvest season **Stored produce**

Table 26. Commodity Scoring Matrix Based on Domestic to Import Price Ratio

CROP	Average D/I Price Ratio	Price Gap (potential)	Conversion factor	Score (profitability potential in local market)
Potatoes	0.29	0.71	4.58	**3.252**
Onions	0.94	0.06		**0.275**
Carrots	0.89	0.11		**0.504**
Crucifer crops	0.85	0.15		**0.687**
Tangerines	0.94	0.06		**0.275**

Table 27. Temporal Export Parity Price for Potatoes; average of three selected EU markets.

Potato Selected EU Markets	Kg	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09
WHOLESALE PRICE IN US $		**0.54**	**0.59**	**0.97**	**0.49**	**0.37**	**0.28**	**0.19**	**0.20**	**0.20**	**0.20**	**0.42**	**0.44**
Commission in US $	10%	0.054	0.059	0.097	0.049	0.037	0.028	0.019	0.020	0.020	0.020	0.042	0.044
Duties + Taxes US $	3%	0.016	0.018	0.029	0.015	0.011	0.008	0.006	0.006	0.006	0.006	0.013	0.013
CIF		0.47	0.51	0.84	0.43	0.32	0.24	0.17	0.17	0.17	0.17	0.37	0.38
Transport US $		0.160											
FOB ALBANIA		0.31	0.35	0.68	0.27	0.16	0.08	0.01	0.01	0.01	0.01	0.21	0.22
PHH + Packaging US $		0.005											
FARMGATE in US $		0.30	0.35	0.68	0.26	0.16	0.08	0.00	0.01	0.01	0.01	0.20	0.22
Production Cost in US $		0.17											
Total Costs		0.41	0.41	0.46	0.40	0.38	0.37	0.36	0.36	0.36	0.36	0.39	0.39
Profit in US $		**0.13**	**0.18**	**0.51**	**0.09**	**(0.01)**	**(0.09)**	**(0.17)**	**(0.16)**	**(0.16)**	**(0.16)**	**0.03**	**0.05**
Profit in %		**25%**	**30%**	**52%**	**19%**	**-4%**	**-33%**	**-89%**	**-81%**	**-81%**	**-81%**	**7%**	**11%**

Table 28. Temporal Export Parity Price for Dry Onions; average of three selected EU markets.

Dry Onions Selected EU Markets	Kg	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09
WHOLESALE PRICE IN US $		**0.62**	**0.60**	**0.71**	**0.74**	**0.83**	**0.60**	**0.44**	**0.39**	**0.35**	**0.36**	**0.37**	**0.37**
Commission in US $	10%	0.062	0.060	0.071	0.074	0.083	0.060	0.044	0.039	0.035	0.036	0.037	0.037
Duties + Taxes US $	7%	0.043	0.042	0.050	0.052	0.058	0.042	0.031	0.027	0.025	0.025	0.026	0.026
CIF		0.51	0.50	0.59	0.61	0.69	0.50	0.37	0.32	0.29	0.30	0.31	0.31
Transport US $		0.160											
FOB ALBANIA		0.35	0.34	0.43	0.45	0.53	0.34	0.21	0.16	0.13	0.14	0.15	0.15
PHH + Packaging US $		0.005											
FARMGATE in US $		0.35	0.33	0.42	0.45	0.52	0.33	0.20	0.16	0.13	0.13	0.14	0.14
Production Cost in US $		0.136											
Total Costs		0.41	0.40	0.42	0.43	0.44	0.40	0.38	0.37	0.36	0.36	0.36	0.36
Profit in US $		**0.21**	**0.20**	**0.29**	**0.31**	**0.39**	**0.20**	**0.06**	**0.02**	**(0.01)**	**(0.00)**	**0.01**	**0.01**
Profit in %		**34%**	**33%**	**41%**	**42%**	**47%**	**33%**	**15%**	**6%**	**-3%**	**-1%**	**2%**	**2%**

Table 29. Temporal Export Parity Price for Crucifer Crops; average of three selected EU markets.

Crucifer crops (Avg$_3$) Selected EU Markets	Kg	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09
WHOLESALE PRICE IN US $		**1.50**	**1.80**	**2.30**	**3.60**	**2.20**	**2.20**	**1.20**	**1.50**	**1.70**	**1.86**	**2.04**	**2.20**
Commission in US $	10%	0.150	0.180	0.230	0.360	0.220	0.220	0.120	0.150	0.170	0.186	0.204	0.220
Duties + Taxes US $	0%	-	-	-	-	-	-	-	-	-	-	-	-
CIF		1.35	1.62	2.07	3.24	1.98	1.98	1.08	1.35	1.53	1.67	1.84	1.98
Transport US $		0.160											
FOB ALBANIA		1.19	1.46	1.91	3.08	1.82	1.82	0.92	1.19	1.37	1.51	1.68	1.82
PHH + Packaging US $		0.005											
FARMGATE in US $		1.19	1.46	1.91	3.08	1.82	1.82	0.92	1.19	1.37	1.51	1.67	1.82
Production Cost in US $		0.20											
Total Costs		0.52	0.55	0.60	0.73	0.59	0.59	0.49	0.52	0.54	0.55	0.57	0.59
Profit in US $		**0.99**	**1.26**	**1.71**	**2.88**	**1.62**	**1.62**	**0.72**	**0.99**	**1.17**	**1.31**	**1.47**	**1.62**
Profit in %		**66%**	**70%**	**74%**	**80%**	**73%**	**73%**	**60%**	**66%**	**69%**	**70%**	**72%**	**73%**

Table 30. Temporal Export Parity Price for Carrots; average of three selected EU markets.

Carrot Selected EU Markets	Kg	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09
WHOLESALE PRICE IN US $		**0.49**	**0.57**	**0.91**	**1.06**	**0.85**	**0.68**	**0.55**	**0.50**	**0.47**	**0.47**	**0.47**	**0.48**
Commission in US $	10%	0.049	0.057	0.091	0.106	0.085	0.068	0.055	0.050	0.047	0.047	0.047	0.048
Duties + Taxes US $	0%	-	-	-	-	-	-	-	-	-	-	-	-
CIF		0.44	0.51	0.82	0.95	0.77	0.61	0.50	0.45	0.42	0.42	0.42	0.43
Transport US $		0.160											
FOB ALBANIA		0.28	0.35	0.66	0.79	0.61	0.45	0.34	0.29	0.26	0.26	0.26	0.27
PHH + Packaging US $		0.005											
FARMGATE in US $		0.28	0.35	0.65	0.79	0.60	0.45	0.33	0.29	0.26	0.26	0.26	0.27
Production Cost in US $		0.13											
Total Costs		0.34	0.35	0.39	0.40	0.38	0.36	0.35	0.35	0.34	0.34	0.34	0.34
Profit in US $		**0.15**	**0.22**	**0.52**	**0.66**	**0.47**	**0.32**	**0.20**	**0.16**	**0.13**	**0.13**	**0.13**	**0.14**
Profit in %		**30%**	**38%**	**58%**	**62%**	**55%**	**47%**	**36%**	**31%**	**27%**	**27%**	**27%**	**29%**

Table 31. Temporal Export Parity Price for Tangerines; average of three selected EU markets.

Tangerines Selected EU Markets	Kg	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09
WHOLESALE PRICE IN US $		**-**	**-**	**-**	**-**	**2.40**	**2.10**	**2.00**	**2.40**	**2.55**	**2.40**	**2.40**	**-**
Commission in US $	10%	-	-	-	-	0.240	0.210	0.200	0.240	0.255	0.240	0.240	-
Duties + Taxes US $	7%	-	-	-	-	0.168	0.147	0.140	0.168	0.179	0.168	0.168	-
CIF		-	-	-	-	1.99	1.74	1.66	1.99	2.12	1.99	1.99	-
Transport US $		0.160											
FOB ALBANIA		-	-	-	-	-	1.58	1.50	1.83	-	-	-	-
PHH + Packaging US $		0.005											
FARMGATE in US $		-	-	-	-	-	1.58	1.50	1.83	-	-	-	-
Production Cost in US $		0.18											
Total Costs		-	-	-	-	-	0.70	0.69	0.75	-	-	-	-
Profit in US $		**-**	**-**	**-**	**-**	**2.40**	**1.40**	**1.32**	**1.65**	**2.55**	**2.40**	**2.40**	**-**
Profit in %						**100%**	**67%**	**66%**	**69%**	**100%**	**100%**	**100%**	

Table 32. Scroring Matrix Based on Temporal Export Parity Price Analysis

Commodity	Avg Profit[1]	Coversion Factor	Score
Potato	-49	0.02427184	0
Onion	8		0.194
Crucifer Crops	69		1.675
Carrots	39		0.947
Tangerine	90		2.184

- **Post-harvest infrastructure.** The presence or absence of adequate post-harvest infrastructure constitutes a major factor determining the success or failure of agriculture-related activities. Within this context the analysis below looks at the current existence of facilities and investment capacity to engage in first-stage processing for each of the commodities under consideration. The Scores are based on consultations with industry participants, as well as experts' knowledge.

Table 33. Commodity Scoring Matrix based on Post-harvest infrastructure

Potatoes	Crucifer Crops	Onions	Carrots	Tangerines
Very basic requirements, especially consisting in root cellars and appropriate technology warehouses in cold areas. Need simple technology interventions to improve shelf-life	Require cold storage facilities within 30 kilometers of production sites. Possibility of using existing storage facilities.	Basic requirements consisting of dry storage facilities available in producing areas. Main issue currently affecting shelf life is poor curing.	Existing cold storage facilities in Divjaka, possibility of expansion.	No cold storage facilities needed at current production levels. Can use rudimentary grading and packing sheds
2	**1**	**2**	**2**	**3**

- **Prospects for differentiation.** High-value agricultural crops face two major challenges: a) increases in global production of agricultural commodities, and b) progressive "commoditization" of specialty crops. These phenomena underscore the need to capitalize on special attributes, processes and markets to differentiate products, and thereby gain competitive edge. Given the fact that most of the commodities currently produced in Albania lack "uniqueness", the analysis below compares the relative likelihood of finding, creating, and exploiting market-sought attributes to gain market share. The scores are largely based on expert opinions based on extensive market knowledge.

Table 34. Commodity Scoring Matrix based on Potential for Product Differentiation

Potatoes	Crucifer Crops	Onions	Carrots	Tangerines
Unlikely	Possibility of targeting the tail ends of the market season, in addition to regional branding	Unlikely	Possibility of targeting the tail ends of the market season, in addition to regional branding…already producing carrots of exceptional quality	Prospects for regional branding and off-season production to supply western and northern Europe
0	**1.5**	**0**	**1.5**	**2**

Forward and backward linkages. The relevance of backward and forward linkages becomes relevant considering that the functioning of the value chains requires a high degree of coordination between firms. Thus, the current and potential existence of links between different nodes of the value chains constitutes a sine-qua-non condition for value-creation and trade to take place. Therefore the scores below derive from observations of the existence on vertical links, as well as current and potential degrees of coordination according to industry leaders and experts.

Table 35. Commodity Scoring Matrix based on Availability of Backward and Forward Linkages

Potatoes	Crucifer Crops	Onions	Carrots	Tangerines
Not clear links to commercial seed producers, which limits the prospects to improve quality and introduce varieties with market-sought attributes. Weak and opportunistic links to traders	Seed and seedling suppliers are well-established and making inroads into farming communities. Trading is still opportunistic. No installed processing capacity.	Seed suppliers are present and well-established; relatively easy to establish production clusters. However, trade is opportunistic, pricing mechanisms are inefficient and quality is inconsistent. There are no processing facilities.	Relationships between input suppliers and farmers appear to be strong. While the bulk of sales take place in occasional basis, there is a limited number of supply chains that are progressively consolidating and whose models can be replicated. No processing.	The tangerine subsector is emerging in Southern Albania. There are no formal market channels and the bulk of sales takes place in an uncoordinated and occasional fashion.
0.5	**1**	**0.5**	**2**	**1**

3.3 Prospects for economic growth

While several commodities in Albania have economic potential (i.e. are profitable, technically viable and have positive market prospects) the commodities selected for AAC support must fulfill other requirements to justify the use of U.S. government funds. These requirements include economic relevance, opportunities for expansion and absence of barriers to entry. These considerations are important because there is need to support subsectors with current or future prospects to generate substantial economic growth, it is also appropriate to invest in subsectors that have the possibility to expand in response to market demand, as well as supporting subsectors without insuperable barriers to entry. The latter is particularly relevant in emerging economies, in which institutions are weak and there is still room for the arbitrary application of regulations. Based on these premises, the scores assigned below are based on both quantitative and qualitative data. In the case of the latter, the assessment relied on in-depth discussions with industry leaders and also on the opinion of local and international experts.

- **Economic relevance of the subsector.** The issue of current relevance is associated to the dimension of the subsector and its ability to effectively capitalize on AAC support and result in a visible and significant economic impact. The scores are the result of comparing the current number of farmers[3] engaged in the production of this commodity, as well as of the number of hectares devoted to production. This selection criterion is further complemented by "opportunities for expansion" listed below and which looks at the prospects for the future.

Table 34. Commodity Scoring Matrix based on Economic Relevance of the Subsector.

	Potatoes	Crucifer Crops	Onions	Carrots	Tangerines
Production 2007 (MT)	15,490	38,200	62,000	3,680	2,605
Average yield per hectare	26.5	24.6	22.1	21.6	10.2
Number of hectares	585	1,553	2,805	170	255
Average farm-size	0.7	0.5	0.6	0.9	1.4
Number of farmers	835.0	3,105.7	4,675.7	189.3	182.4
Proportion of farm families	9.3%	34.6%	52.0%	2.1%	2.0%
Proportion of land	10.9%	28.9%	52.3%	3.2%	4.8%
Score	**1.01**	**3.17**	**5.21**	**0.26**	**0.34**

- **Opportunities for expansion.** This criterion refers to the availability of factors of production to allow for the growth of the subsector as a way to expand those production activities that prove successful. This is relevant in the light of the prevalence of small landholdings, poor access to credit and labor constraints.

Table 35. Commodity Scoring Matrix based on Opportunities for Expansion

Potatoes	Crucifer Crops	Onions	Carrots	Tangerines
Potatoes are the mainstay of highlands in Central, eastern and northern Albania. In these regions potatoes compete with other vegetable crops produced mainly for household consumption. Production takes	Cabbage and cauliflower are grown in considerable quantities (in excess of 38,000MT in 2007), occupying some 1,500 hectares. They are grown under semi-commercial systems in mid-elevations	Onion production takes place mainly in the Korca region, with smaller volumes grown in the highlands of eastern and northern Albania, the crop is generally grown in small landholdings and with the use of manual labor.	Evidence suggests that carrot production is increasing, both in terms of total area grown to the crop, as well as with regards to seasonal production patterns. This crop can be competitive in small landholdings,	Tangerine production is increasingly expanding in the southernmost part of Albania, where emigration is having a positive effect on farm size. Labor needed for orchard maintenance is locally available and laborers for

[3] Estimations based on discussions with representatives of the subsectors and discussions with officials of the Ministry of Agriculture, Food and Consumer Protection, and FAO statistical databases.

place in relatively small plots using family labor. Seed potatoes, the most costly input, are typically saved by farmers, thereby reducing production costs and reducing the reliance on external capital. Based on the relative autarchy of the potato production systems—as they currently are, there are prospects to expand the area grown to this conditions are highly feasible.	throughout the country and commercially in the Divjaka, Fier and Lushnja regions. While crucifer crops compete for land with a variety of annual crops, market incentives have the potential to favor a reallocation of resources leading to the expansion of the area grown to these commodities. Production technology packages are widely available, as are seeds of market-sought varieties and other inputs.	Area under production to this crop can be expanded under the current production system, especially considering that inputs and production know-how are widely available, and that there is no evidence suggesting a lack of financial capacity to invest in the production of this crop.	especially considering the reliance on manual labor for maintenance and harvest. Carrots are not a capital intensive crop, hence accessible to a large number of farmers; land availability is not a constraint for further expansion, and labor supply does not represent a limitation. Therefore, evidence suggests that producers in the coastal areas of Albania posses the land, capital and access to labor to expand production in response to market demand.	harvest are typically brought from the northern part of the country. In contrast with other regions of Albania, most capital investments are covered by remittances. Based on these criteria there are opportunities for the expansion of area grown to tangerine, should there be market opportunities.
1.75	**2.0**	**2.0**	**2.25**	**2.0**

- **Barriers to entry.** The existence of barriers to entry fundamentally refers to capital, institutional or knowledge-related factors limiting the participation of new entrants in a specific value chain. The scores assigned to each commodity derive from an overview of the existence—or not of barriers to entry, with particular emphasis on investment requirements. Derived from the fact that barriers to entry constitute a detrimental attribute for the subsectors subject of this analysis, the score is assigned is inverse to the dimension of the barriers.

Table 36. Commodity Scoring Matrix based on Barriers to Entry

Potatoes	Crucifer Crops	Onions	Carrots	Tangerines
Investments required for the production phase, while relatively high as compared to alternative crops, are at a level which are affordable to farmers. There are technology packages available, and technology	Technology packages for cabbage, cauliflower and broccoli are widely available and production costs are affordable to most farmers. However, in the case of broccoli there is need for	Production costs are relatively high (US$380/mt) as compared to the region, however the subsector is functional without subsidies or other financial support, which constitutes evidence of the existence of financial capacity	Production of fresh carrots is a relatively low-input crop, production technologies are available to most farmers and as long as marketed fresh, do not require further investments.	Planting material is widely available from nursery operators and traders in southern Albania. However there is need for targeted technical assistance in advanced production technologies, which could be provided

interventions required to compete in the regional markets can be guided by AAC at relatively low cost. Institutional framework is conducive to investments in this commodity.	investments in pre-cooling and icing facilities not within the reach of most traders.	for production. Knowledge of production technologies in widely available and while there are serious post-harvest management issues currently affecting quality, these can be addressed with minimum investments.		by AAC free of cost. Additionally there is need for substantial investments in drip irrigation/fertigation equipment, which may be out of the reach of small-scale farmers.
1.0	**0.5**	**1.0**	**1.5**	**1.0**

3.4 Feasibility

- **Willingness to adapt by changing practices.** Transitioning from surplus production to fully commercial production system brings about a series of challenges for farmers and traders. These challenges are mainly associated to the identification and adoption of crop varieties with market potential, the introduction of technological innovations to respond to quality and food safety requirements, and the adoption of coordination mechanisms along the value chains. As in any society, there are early adopters, late adopters and non-adopters; hence the probabilities of success in engaging in intensive-commercially oriented agriculture systems will greatly depend on the proportion of farmers that fall in each of these categories. The scores assigned below are the result of intensive discussions among the AAC team, progressive farmers and traders, and specialists from partner organizations. They constitute a qualitative indication of the degree of openness and willingness of value chain actors to adapt by changing production practices.

Table 37. Commodity Scoring Matrix based on Willingness to Adapt to Changing Practices

Potatoes	Crucifer Crops	Onions	Carrots	Tangerines
0.25	**1.0**	**0.5**	**1.25**	**2**

- **Ability to produce results within desired timeframe.** The AAC program is in its second year of implementation, and while investments for long-term agriculture development are justifiable within the development framework, the task order requires the delivery of measurable economic impact within the implementation timeframe. Achieving this goal requires greater focus in short-cycle commodities that would allow for several iterations before the project closed down. The latter will allow AAC to ensure that the value chains can operate on their own, fueled by market incentives and led by proactive entrepreneurs. Within this context, the scores listed below constitute a qualitative assessment of the ability to produce measurable results before July 2012. This assessment is the result of extensive discussions among the AAC team.

Table 38. Commodity Scoring Matrix based on Ability of the Project to Produce Results Within the Desired Timeframe

Potatoes	Crucifer Crops	Onions	Carrots	Tangerines
The production phase requires minimum changes, which can be achievable in 3-4 seasons. However, being a commodity grown and traded in large volumes throughout Europe, achieving and acceptable level of competitiveness in the regional market is likely to require more than 3 years.	There is need for the introduction of technological innovations in production, post-harvest handling and first-stage processing, which are achievable in 2-3 seasons. Climatic complementarities of Albania with the rest of Europe make it feasible to consolidate a position in the regional and international markets within the life of the project.	There is need to introduce substantial changes in post-harvest handling, storage and packaging practices, which will require a minimum of two years. Similarly, being a mainstream commodity with little room for differentiation will require a substantial amount of time to become competitive in the regional markets.	This value chain will require minimum interventions at the production level, which will require a maximum of 2 seasons. Most of the project's efforts should be focused in value adding and marketing, which is achievable within the life of the project.	There are already over 250 hectares planted to this crop, most of which have reached productive age, which partially eliminates the concern usually associated to perennial crops. Additionally, the technology adjustments required to increase the efficiency of the production phase are minimal, hence most of the efforts required to improve the competitiveness of the crop should be directed toward marketing, which is achievable before 2012.
0.5	**1.50**	**0.5**	**1.25**	**1.25**

- **Private sector buy-in.** The engagement and commitment of private sector actors to the development of the value chains constitutes a *sine qua non* condition for sustainability. Within this context, AAC discussed with entrepreneurs (farmer, traders and processors) to assess their level of interest and commitment to invest in the proposed subsectors. As expected in these cases, private sector buy-in is a function of investments required, potential gains and risks associated to each commodity. The scores presented in the table below summarize the results of these consultations.

Table 39. Commodity Scoring Matrix based on Private Sector Buy-in

Potatoes	Crucifer Crops	Onions	Carrots	Tangerines
1.0	2.5	1.5	2	3

IV. Subsector Ranking

As shown in the Subsector Ranking Matrix shown in Table 40, the subsectors with the highest likelihood of success based on market prospects, competitiveness, prospects for economic growth and feasibility are—in order of relevance tangerines, carrots and crucifer crops

Based on these criteria, AAC proposes to integrate these three strategic subsectors to its implementation plan for year two onwards.

The integration of these subsectors constitutes a movement to a set of more sophisticated products, particularly in terms of production, value adding and target markets. With reference to the latter, AAC will put especial emphasis to enable its clients to access high-value markets in the regional and international markets.

Table 40. Subsector ranking Matrix

	Selection Criteria	Potatoes	Onions	Crucifer Crops	Carrots	Tangerines
Market Prospects	Opportunities for import substitution	0.23	0.93	0.01	0.07	8.76
	Export potential within the region	0.78	1.65	1.92	0.58	5.07
	Export potential to the EU	0.21	0.07	3.80	3.08	2.85
	Sub-Total	1.22	2.65	5.73	3.73	16.68
Competitiveness	Profitability	0.00	0.19	1.68	0.95	2.18
	Post-harvest infrastructure	2.00	1.00	2.00	2.00	3.00
	Prospects for differentiation	0.00	1.50	0.00	1.50	2.00
	Forward and backward linkages	0.50	1.00	0.50	2.00	1.00
	Sub-Total	2.50	3.69	4.18	6.45	8.18
Prospects for economic growth	Economic relevance of the subsector	1.01	3.17	5.21	0.26	0.34
	Opportunities for expansion	1.75	2.00	2.00	2.25	2.00
	Barriers to entry	1.00	0.50	1.00	1.50	1.00
	Sub-Total	3.76	5.67	8.21	4.01	3.34
Feasibility	Willingness to adapt by changing practices	0.25	1.00	0.50	1.25	2.00
	Ability to produce results within desired timeframe	0.50	1.50	0.50	1.25	1.25
	Private sector buy-in	1.00	2.50	1.50	2.00	3.00
	Sub-Total	1.75	5.00	2.50	4.50	6.25
TOTAL		9.23	17.01	20.62	18.68	34.45

Figure 1. Subsector Ranking Based on Market Prospects *vis a vis* Competitiveness

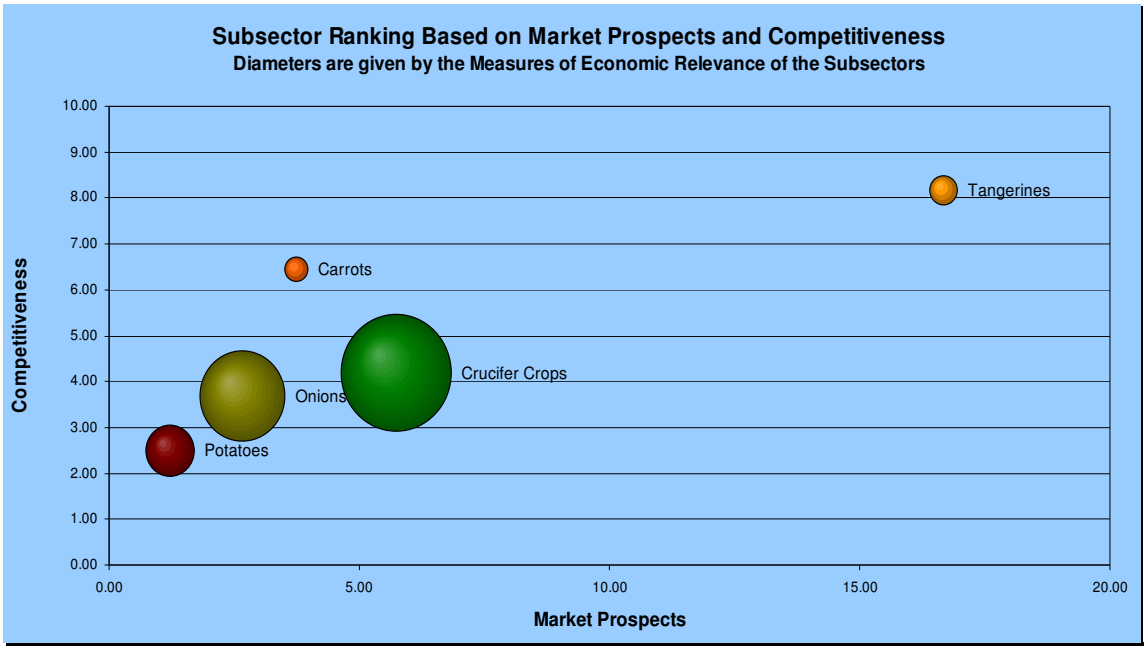
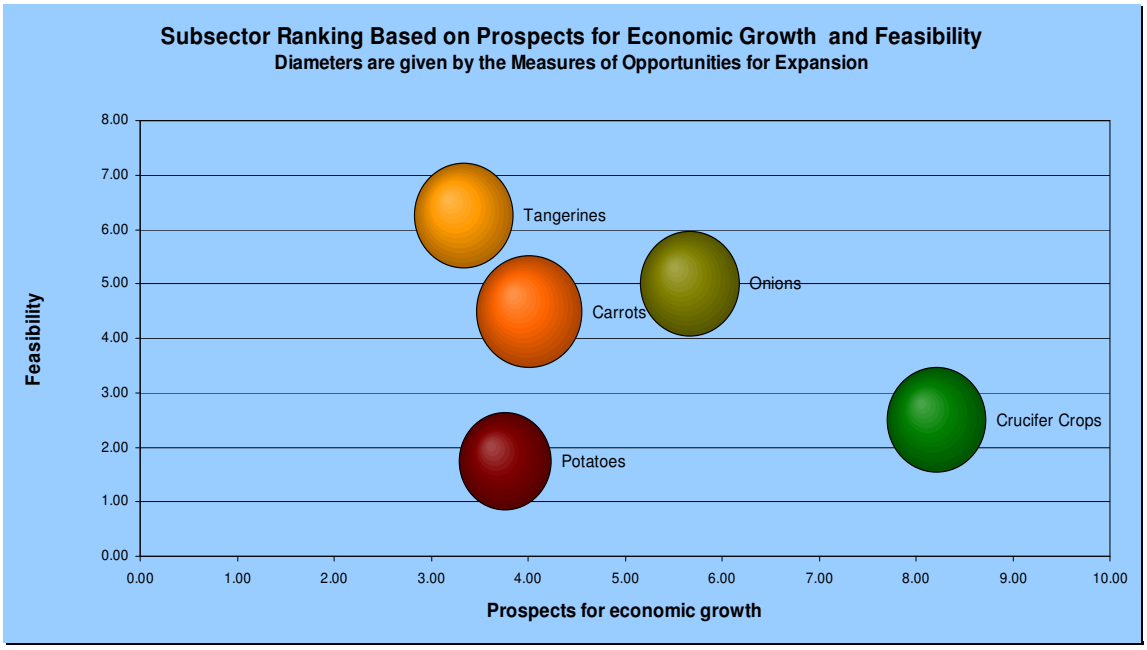


Figure 2. Subsector Ranking Based on Feasibility *vis a vis* Prospects for Economic Growth



V. Next Steps

Should this selection be approved, AAC will conduct value chain studies seeking to identify the key strategic issues constraining the growth of these subsectors. The strategic issues synthesis and remedial measures will, in turn constitute the commodity development plans to be integrated in the project's Annual Work Plan.