



PARTICIPATORY GUARANTEE SYSTEM (PGS): SUSTAINABILITY assessment for vegetable in Vietnam

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STUDY QUESTIONS: Sustainability

1. Economic factors affecting sustainability of PGS as certification scheme: economic efficiency; cost of certification;
2. Social factor: labor, small producer, safe food to consumer
3. Environmental factor: *potential expansion* of PGS for supporting for organic and safe vegetables





1. Rationality

- After **15 years** of implementation, VietGAP and Certification for ensuring safe vegetable producing condition now *facing difficulties in expanding production area and attraction to voluntary participation of producers due to high certification cost*
- *PGS* is a **quality management system** being implemented to manage the quality of organic food in many parts of the world that **are suitable for smallholder producers**
- In Vietnam, PGS has been successfully applied on producing organic vegetables and extend to safe vegetables

Study on sustainability of PGS and potential of PGS expansion is necessary



Location, Business Objects and the number of studied factors

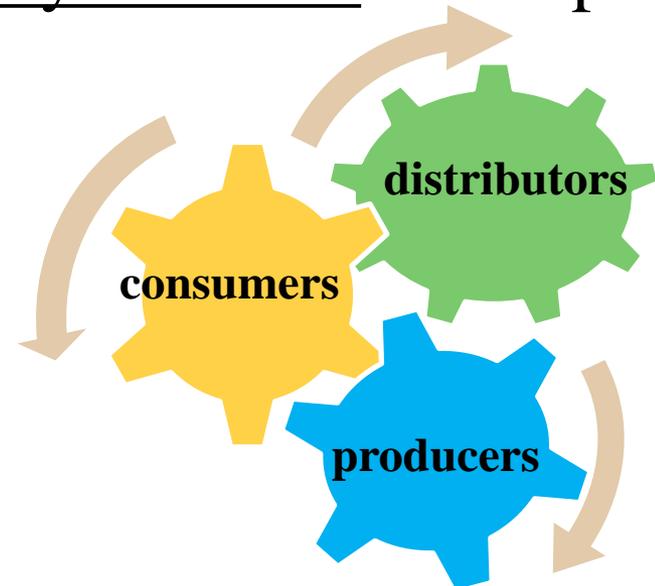
Object	Location/Quantity/Factor
PGS for organic vegetable	Thanh Xuan commune –Soc Son District (Hanoi) Luong Son District (Hoa Binh)
PGS for safe vegetable	Tan Duc commune - Viet Tri - Phu Tho; Van Hoi -Vinh Phuc; Ro Phai, Na Chuong- Lang Son
Producer	90
Store	25
Consumer	120
Local officials	Officials of communes, district, province, division of Agriculture, Plant Protection sub-department ...



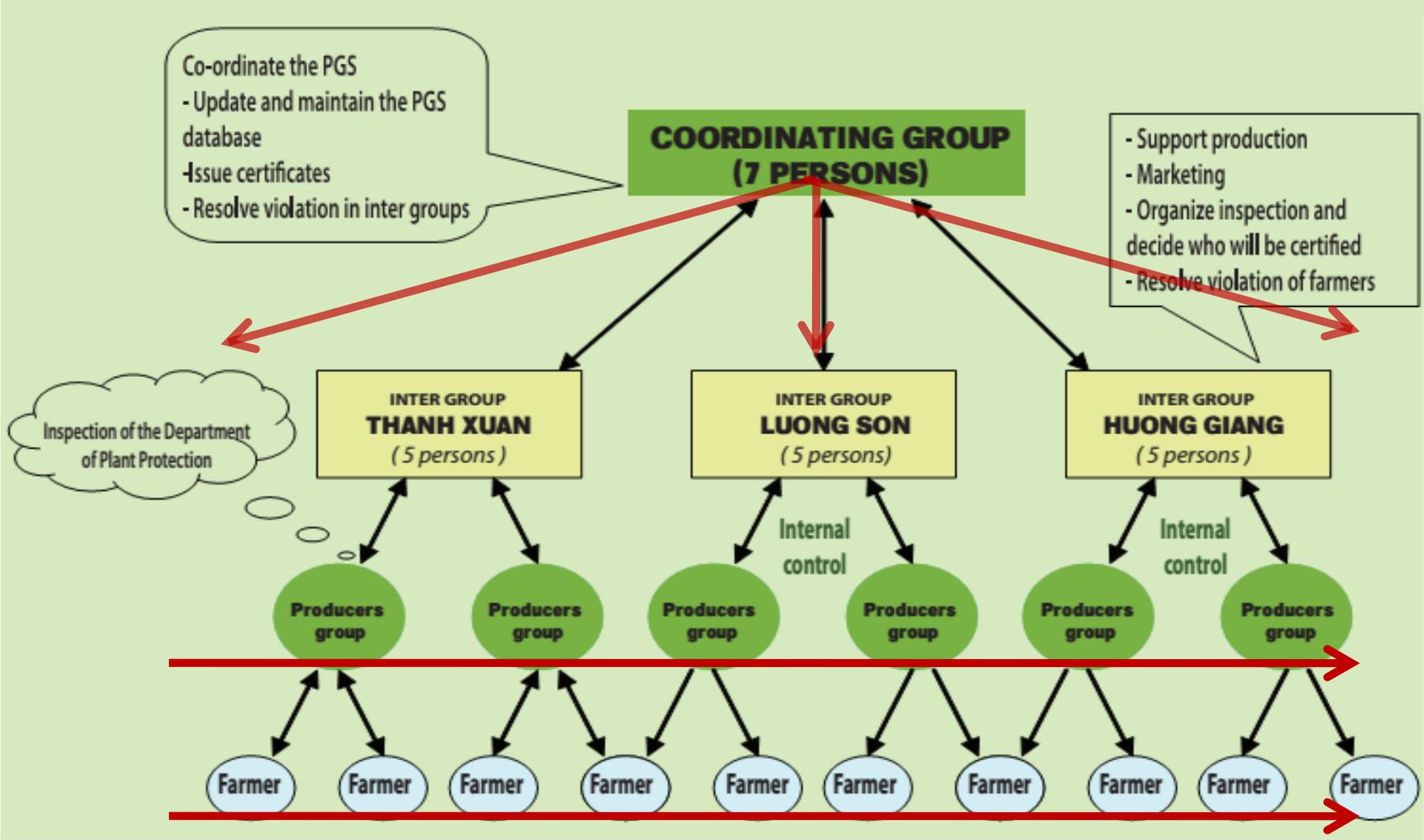
RESEARCH RESULTS

What is PGS ?

Participatory Guarantee System (PGS) is a system of quality assurance based on the participation of organizations and people directly involved in the product supply chain.



OPERATION OF PGS FOR ORGANIC VEGETABLE





Characteristics of present PGS

PGS for organic vegetables:

1. **Operation of PGS in localities are highly independent**, attracting the participation of stakeholders in the commodity supply chain for quality certification (enterprises and producers)
2. The manner of organization **encourage producers and local authorities responsible for their products**

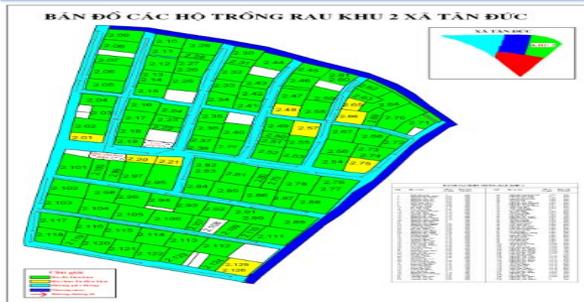
PGS for safe vegetables:

1. Operation of PGS in localities **depends heavily on local agriculture bodies (Plant protection sub-department)**
2. Lack of distributor stakeholder
3. Only 2 main stakeholders in the supply chain: producers and consumers

Participation of consumers and consumers' representative organization in the system is not really active

ORGANIZATION OF VEGETABLE PRODUCTION IN PGS SYSTEM

Qualified areas for safe vegetable production



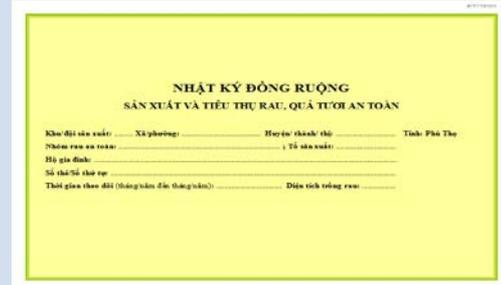
- Parcel mapping to manage
- Coding parcel and producing households

Establishing interest groups



- Training in production
- Training in methods of production planning.
- Training in field recording skill
- Training in cross monitoring (internal monitoring)

Management of production



- Forms of recording
- Parcel codes and signs of household codes and parcel codes
- Signs of field production procedure

Organization of retail system



Producers of PGS safe vegetables
(also sellers)

- Lack of knowledge and skill
- Un-organization



Stores participating in PGS for
organic vegetable system





Time spent to maintain quality monitoring system

Measure	Unit	PGS
Internal monitoring		
Dairy recording	working days/month	0.2
Group and intergroup meetings	working days/month	0.5
Total	working days/month	0.7
External monitoring		
Cross-checking among the groups	Working days/month	1
Independent inspection	Working days/month	-
Inspection to grant certification	Working days/month	0.5
Total	Working days/ month	1.5



Low costs for maintaining the PGS system

Content	Unit	Soc son	Luong son
Producer			
Cross-monitoring among the groups †	1000VND /person	125	150
Cost of certification checking	1000VND /person	125	150
Cost to support for travelling in cross-monitoring	1000VND /person	-	36
Distributing system	1000VND /store	1000	1000

† *Converted from the working day of participant in cross-monitoring*



PRODUCERS

Agricultural labors participating in PGS

	Hanoi	Hoa binh	Phu Tho	Lang Son
Qualification				
<i>Secondary school (%)</i>	88.3	97.2	92	82
Age (years old)	30-40	28-38	40-50	25-35
Gender				
<i>Female (%)</i>	90	93.3	75	91.4
<i>Male (%)</i>	10	6.7	25	8.6
Production scale (m²/ household)	500	480	440	-

❖ More than 80% of agricultural producers are qualified in terms of production level, age and production scale



LIST OF PARTICIPANTS IN PGS INTERGROUP COORDINATION COMMITTEE

Representatives	Hanoi	Hoa Binh	Phu Tho	Lang Son
Coordination committee				
<i>Producers</i>	X	X	X	X
<i>Distributors</i>	X	X		
<i>Local government</i>	X	X	X	X
<i>Consumers</i>				
<i>Agricultural agencies (Department of plant protection, quality management and food safety)</i>		-	X	X
<i>Consumer organization</i>				
Independent inspector				
<i>Agricultural agencies (Department of plant protection, quality management and food safety)</i>		-	X	X
<i>Representatives of producer and distributor</i>	X	X		

x: main participant; -: unidentified

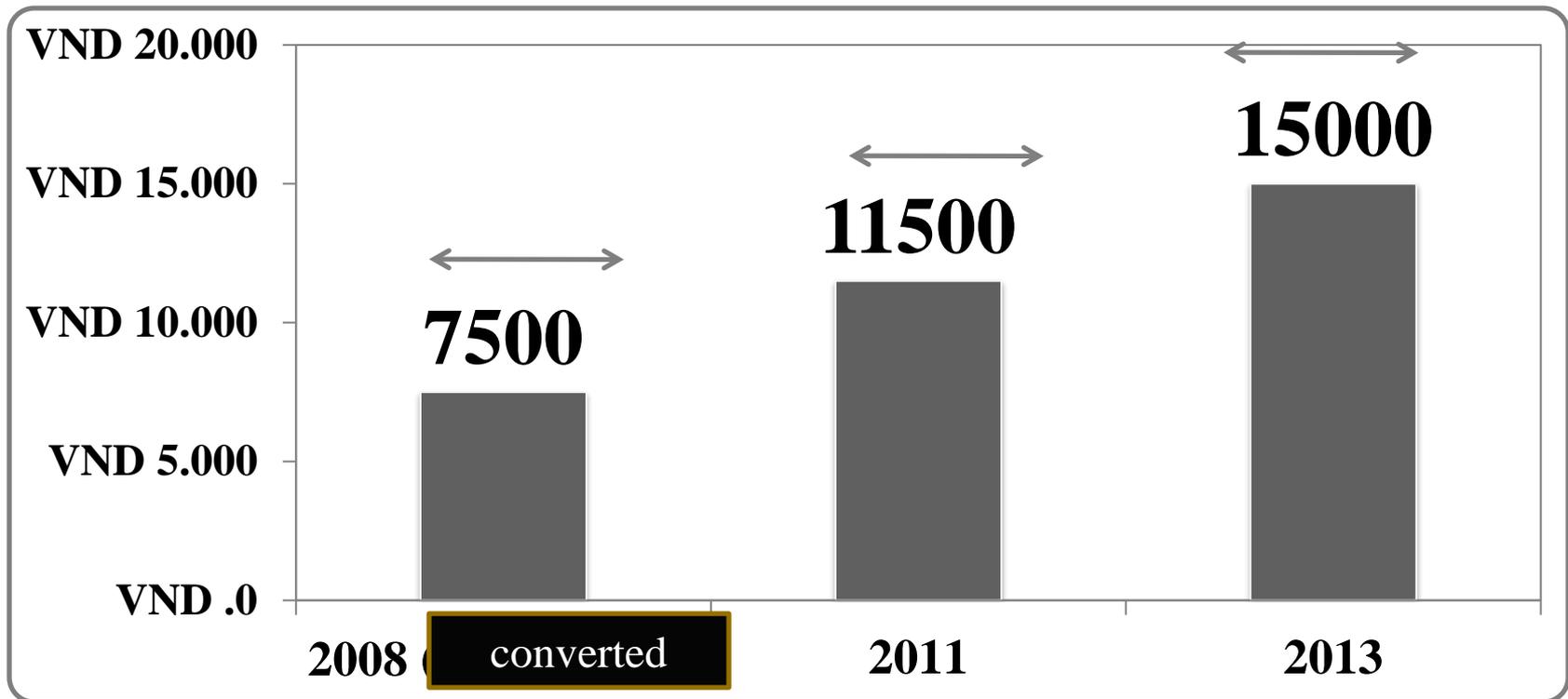


Cost - benefit analysis from PGS vegetable production

Cost (VND)	PGS safe vegetable	Safe vegetable	Organic vegetable
Total production cost	461,500	546,000	540,000
<i>Labor cost (8-10 labor/sao)</i>	1,105,000	975,000	1,950,000
<i>Production (kg)</i>	700	1000	600
<i>Selling price (vnd/kg)</i>	8000	4000	15,000
<i>Revenue (vnd)</i>	5,600,000	4,000,000	9,000,000
<i>Benefit (vnd)</i>	5,138,500	3,454,000	8460,000
Benefit after subtracting labor cost	4,495,000	2,479,000	6,510,000



PGS Organic Vegetable prices in Thanh Xuan & Luong Son



PGS Organic Vegetable prices over the years (VND/kg)



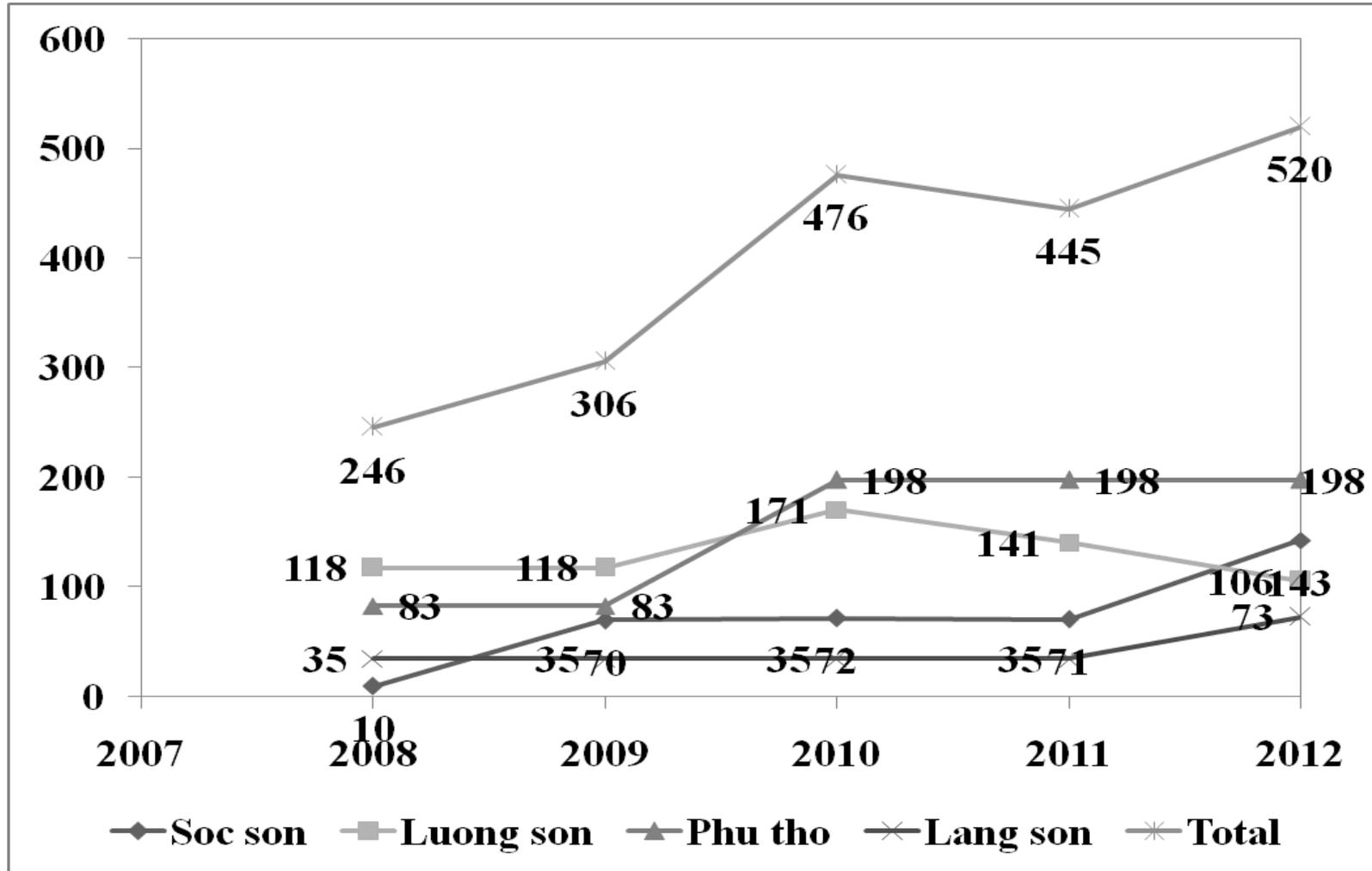
Vegetables in the household income share

	Hanoi	Hoa Binh	Viet Tri	Lang Son
% Income from vegetables	70-90	10-20	50-70	20-30
The average income of households (million VND / year)	66	48	40	48
Other Sources	Livestock Service	Livestock other crops (Citronella, rice, acacia)	Livestock Service	Livestock Fruit crop Forest crop Service

Bring about regular income to households



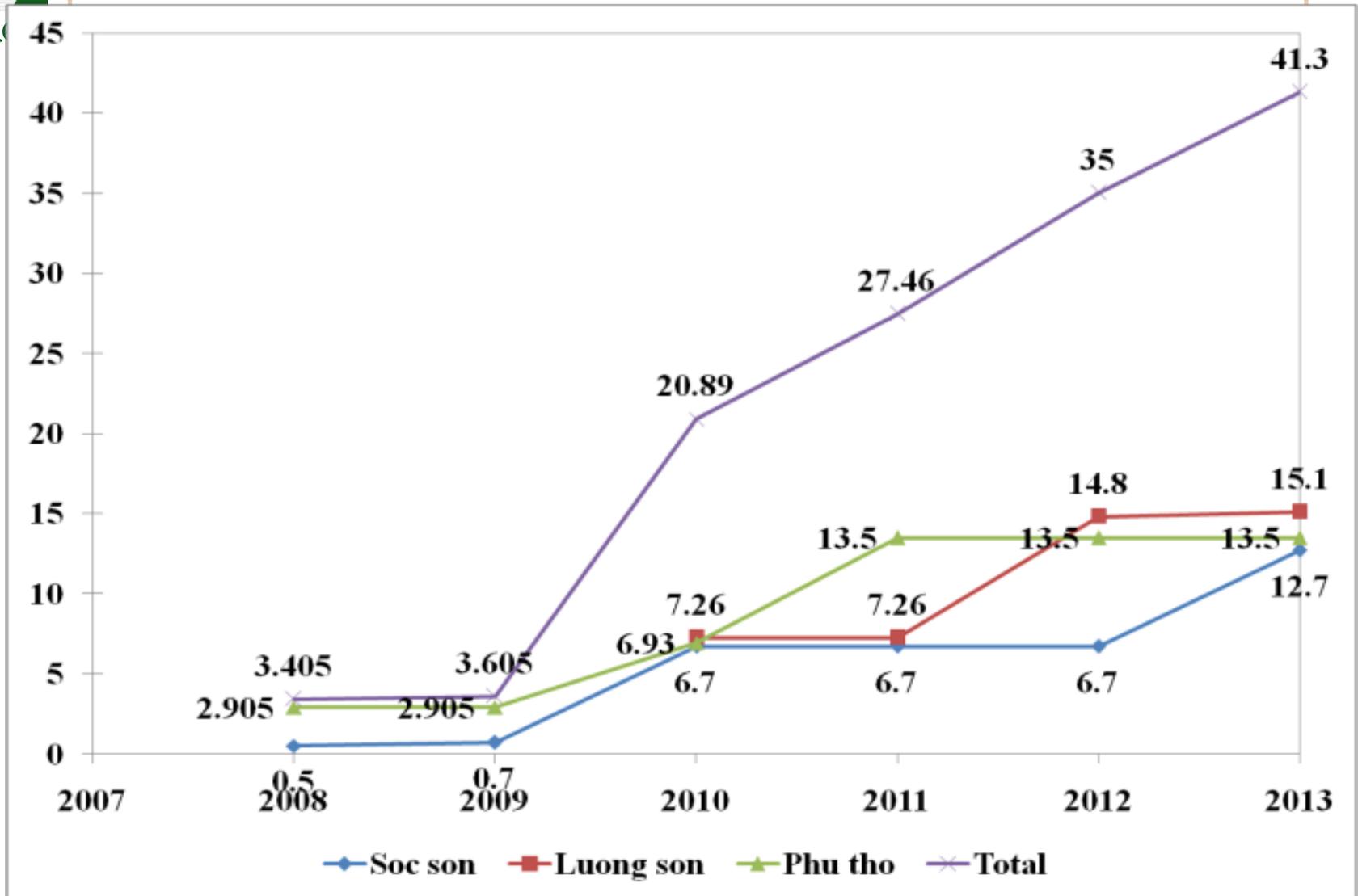
Rapid increase in number of producers



Number of members participating in the PGS system in production regions over the years



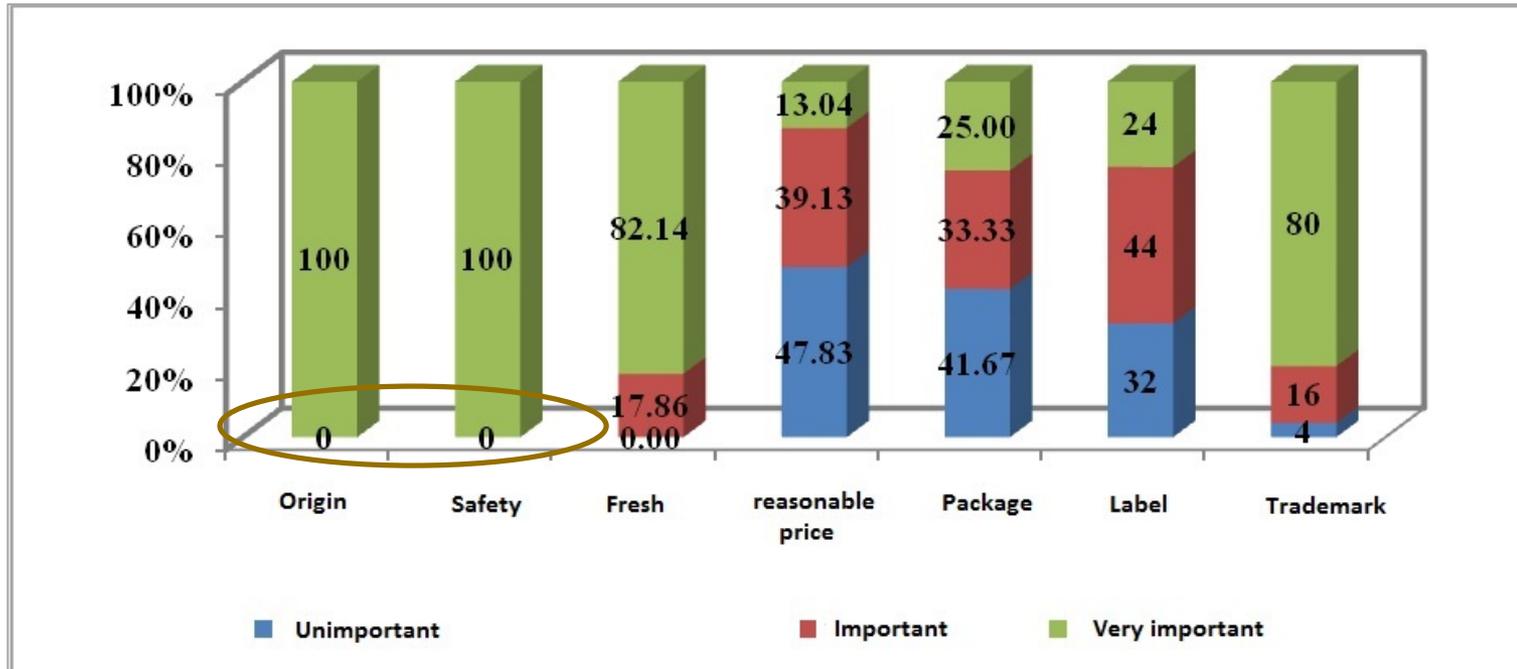
Rapid increase in production area



Areas (ha) of producing region over the years



What are consumers aware of when purchasing vegetables?



PGS contributing to consumer trust when buying vegetables



CONSTRAINTS OF PGS

Proportion of consumers knowing PGS certification

Locality	Rate (%)	Through
Phu tho	70.0	Television, Women association, Radio
Lang son	33.3	Television; Leaflets; Radio
Hanoi	21.0	Internet

<5% of consumers are aware of PGS certification when purchasing vegetables

>70 % of consumers are confident if certificate is given by the State



CONCLUSIONS

- The manner of production organization under PGS is appropriate for small vegetable production in Vietnam
 - ❖ Scale of production
 - ❖ Resolving the issue of lack of effective organization method
- PGS has brought about high economic efficiency.
Compared with ordinary vegetable:
 - ❖ PGS organic vegetable brings 4 million VND/sao/crop higher;
 - ❖ PGS safe vegetable brings 2 million VND/sao/crop higher;
 - ❖ Stable price



CONCLUSIONS

- Certification of quality is **continuously** maintained with **low certification cost: 250-350 thousand VND** /household/year;
- Production under PGS has facilitated the formation of organizations of producers, distributors and consumers
- Localities where PGS has been applied have understood clearly the benefits, which is proved by the favor in terms of policy to develop the system
- **PGS has the sustainability regarding 3 factors: economic, social and environmental**



RECOMMENDATIONS

□ **The state:**

- ❖ Should take into consideration the recognition of PGS as a community-based supervisory system
- ❖ Should make policies to improve capacity of stakeholders in the chain (producers, distributors, consumers)
- ❖ Should have appropriate investment in promotion for easier recognition of PGS itself and PGS-certified products

□ **Local authorities:**

- ❖ Applying PGS as a solution to **improve quality** of local products
- ❖ Encourage and facilitating conditions for favorable application of PGS



RECOMMENDATIONS

□ **Producers:**

- ❖ Should apply more effective methods of **management of products** supplied to the market
- ❖ Should **put forward proposal actively** for PGS to be officially recognized

□ **Consumers:**

- ❖ Should launch more campaigns to **enhance consumers' understanding**
- ❖ Participating more actively in consumers' association
- ❖ Giving more concrete criteria of quality to retailers

□ **Distributors:** more transparent to consumers and media



**Thank you for
your attention!**