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Governing for
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in Georgia

REGULATORY IMPACT ASSESSMENT (RIA) ON THE CROP INSURANCE REFORM OF GEORGIA

Final Presentation

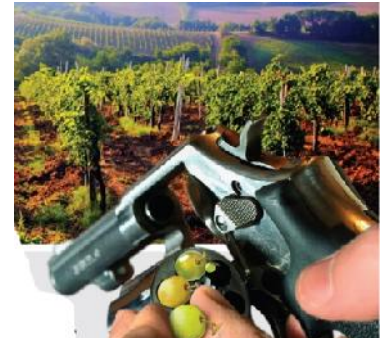
ISET POLICY INSTITUTE

November 5, 2015

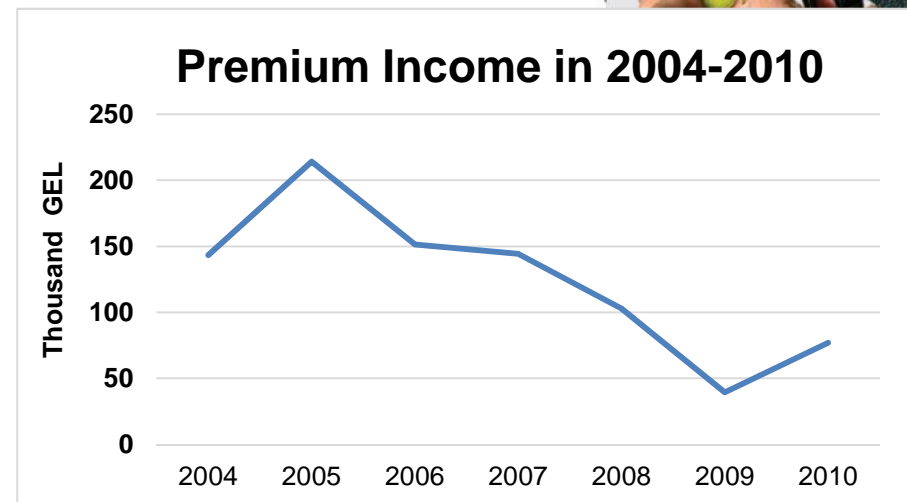
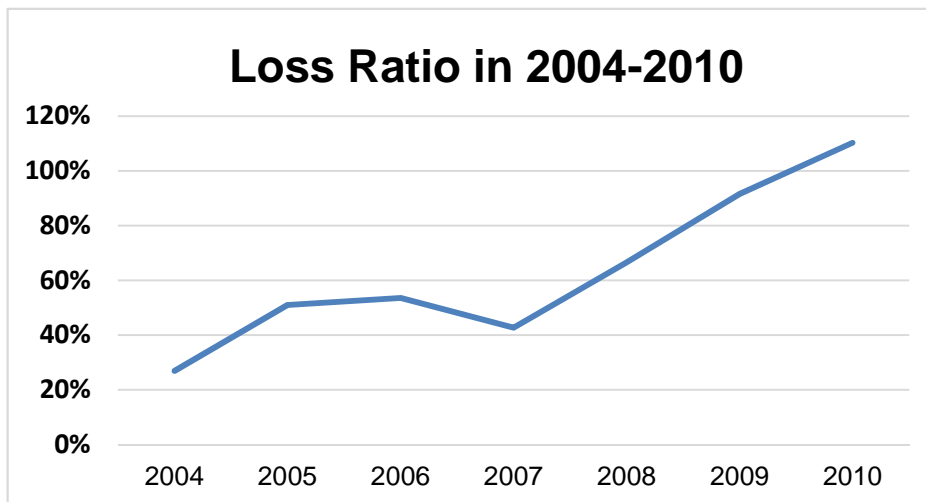
CONTENT

- INTRODUCTION
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- POLICY OPTIONS
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INTRODUCTION



Agricultural insurance in Georgia in 2004-2010



Source: *Georgian Insurance Association (GIA)*

- Lack of farmers' awareness and experience
 - Lack of technical capacity (data, loss adjustment, distribution channels)
- **Absence of agricultural insurance market**

INTRODUCTION

Pilot national agricultural insurance programs 2014 and 2015

General objectives of government intervention

- Develop the agricultural insurance market in Georgia
- Support agricultural production and increase competitiveness of farmers and agribusinesses
- Support the income of people involved in agriculture and minimize their risks

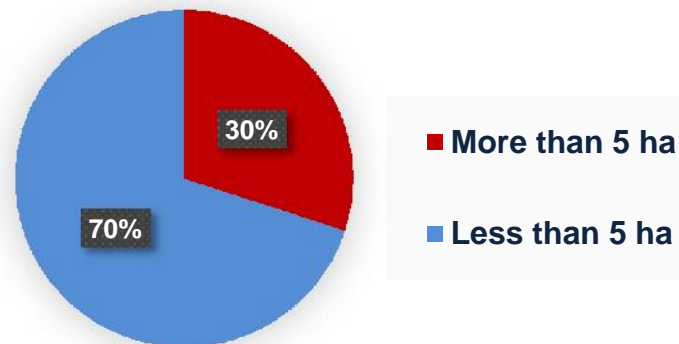
Source: GoG, 2014; GoG, 2015.

INTRODUCTION

Pilot insurance programs 2014 and 2015

	2014	2015 *
Policies sold	20'952	3'439
Total premiums (in million GEL)	12.5	2.0
Amount of subsidies (in million GEL)	11.7	1.1
Average level of subsidies (%)	94	55
Insured area (in ha)	18'596	3'112

Share of the small and large farmers in 2014-2015



Source: Agricultural Projects Management Agency (APMA)

* July 2015

RIA PROCEDURES

RIA PROCEDURES

Stakeholder consultations (June-August 2015)

- Farmers and GFA
- Insurance companies and GIA
- APMA
- Agricultural insurance expert

→ Interviews, focus groups, and a workshop



POLICY OPTIONS

POLICY OPTIONS

- **Option 1 (Baseline):** Government does not introduce NARMA but continues with the current pilot.
- **Option 2:** Government adopts and develops NARMA model

Note: no budget cap

POLICY OPTIONS

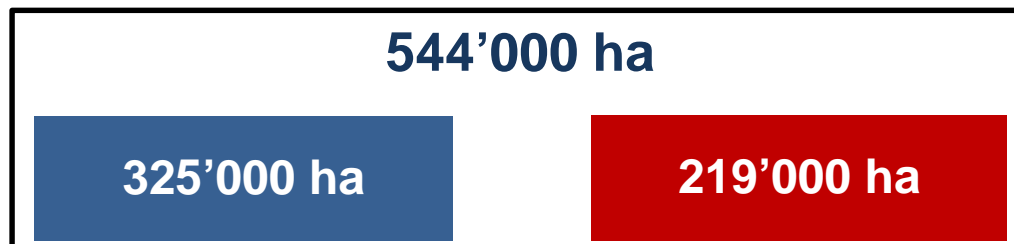
OPTION 1 (Baseline)	OPTION 2 (NARMA)
Continuation of pilot program	Creation of NARMA
Managed by APMA	PPP
Av. subsidy rate of 65% for small and large farms	Av. subsidy rate of 75% for small farms and 50% for large farms
Subsidies fixed for 10 years	Subsidies gradually decrease
No restriction on land plot size	No restriction on land plot size
Less investments in service quality improvement & awareness campaigns	More investments in service quality improvement & awareness campaigns

MODEL

MODEL

Small farms <= 5 ha
Large farms > 5 ha

**Maximum
 insurable land**



**Potential demand
 for insurance**



10% will never insure
 10% cannot afford

More sensitive to quality and information

- Focus group discussion
- Pilot data

MODEL

Penetration rate for 2016 (and afterwards):

1. Responsiveness

- small farms are twice as responsive to price change as large farms

2. Insurance experience

- Direct effect 1: Negative experience (APMA data on complaints)
- Direct effect 2: The level of skepticism
- Indirect effects: neighbors of insured farmers

MODEL

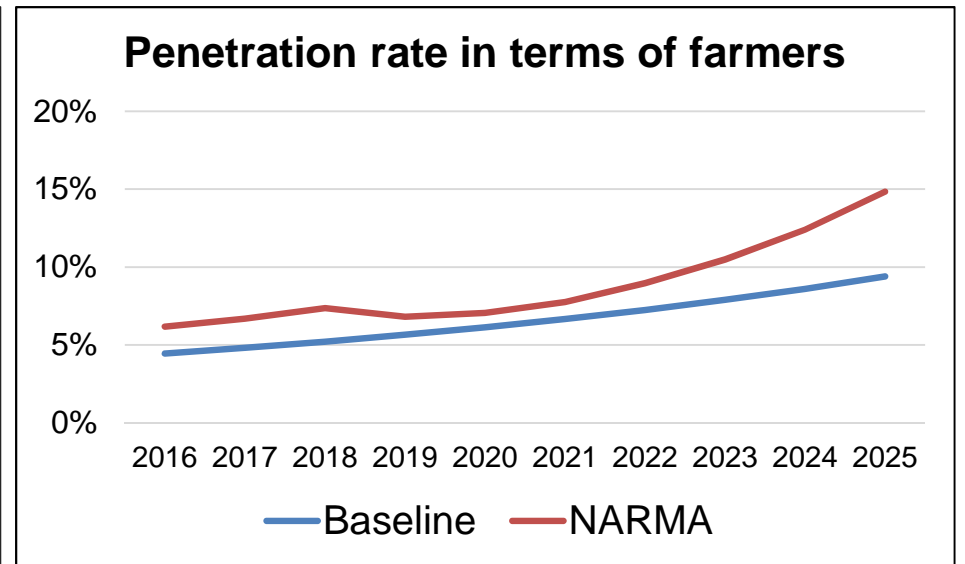
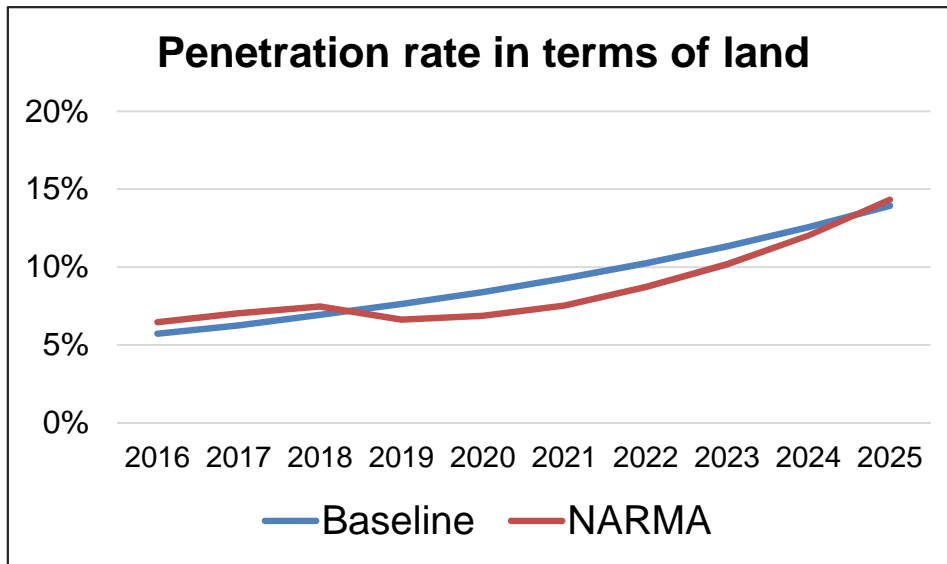
Stakeholders	Costs	Benefits
Farmers	<ul style="list-style-type: none"> • Premiums paid 	<ul style="list-style-type: none"> • Indemnities received
Insurance companies (IC)	<ul style="list-style-type: none"> • Indemnities paid • A&O costs • Profit taxes • Payments to reinsurers 	<ul style="list-style-type: none"> • Premiums collected from farmers • Subsidies paid by the government • Reinsurance commissions
Government	<ul style="list-style-type: none"> • Premium subsidy paid • Project running costs 	<ul style="list-style-type: none"> • Profit taxes

MODEL

Stakeholders	Costs	Benefits
Farmers	<ul style="list-style-type: none"> • Premiums paid 	<ul style="list-style-type: none"> • Indemnities received
Insurance companies (IC)	<ul style="list-style-type: none"> • Indemnities paid • A&O costs (-5%) • Profit taxes • Payments to reinsurers (-1%) • NARMA fee (12% of premiums) 	<ul style="list-style-type: none"> • Premiums collected from farmers • Subsidies paid by the government • Reinsurance commissions (0)
Government	<ul style="list-style-type: none"> • Premium subsidy paid • Project running costs (0) • NARMA set up costs 	<ul style="list-style-type: none"> • Profit taxes
NARMA	<ul style="list-style-type: none"> • A&O costs • Loss adjustment costs • Distribution of subsidies to partner ICs 	<ul style="list-style-type: none"> • Start-up funds/equity • Reinsurance commissions • NARMA fee (12% of premiums) • Premium subsidies

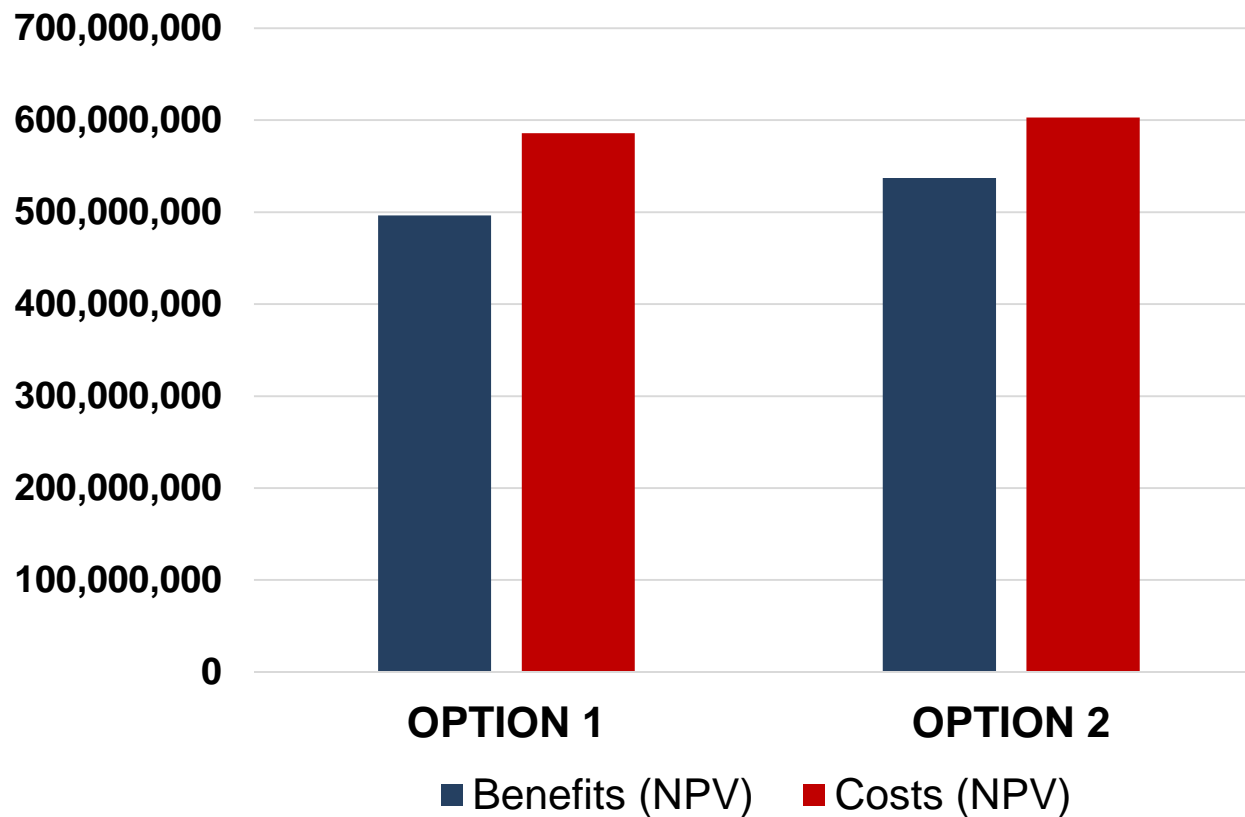
RESULTS

RESULTS



RESULTS

Comparison of costs and benefits of policy options (NPV, GEL)



RESULTS

NPV of net benefits for the stakeholders (million GEL)

Stakeholders	Option 1	Option 2
Small farmers	23.6	33.1
Large farmers	29.1	2.5
Insurance companies	60.8	34.0
NARMA		12.1
Government	-202.8	-147.2
Overall net benefit	-89.3	-65.5

RESULTS

Some potential benefits not considered in quantitative part

- Reduced farmers' financial vulnerability
- Increased access to finance
- Increased investment in agricultural production

Other criteria (in addition to NPV):

- Effectiveness (in achieving Government's goals)
- Feasibility/Easy to comply
- Minimization of risks associated with the reform
- Maximizations of collateral benefits associated with the reform

RESULTS

EVALUATION CRITERIA	OPTION 1 (PILOT with Fixed Subsidy Level)	OPTION 2 (NARMA with Decreasing Subsidy Level)
Benefits-costs (NPV in million GEL)	-89.0	-65.5
Effectiveness 1	++	+++
Effectiveness 2	+	+
Effectiveness 3	++	+++
Feasibility / Ease to comply	++	++
Minimization of risks associated with the reform	++	+++
Maximizations of collateral benefits associated with the reform	++	+++
SUMMARY	++	+++ /+++

RESULTS

EVALUATION CRITERIA	OPTION 1 (PILOT with Fixed Subsidy Level)	OPTION 2 (NARMA with Decreasing Subsidy Level)	OPTION 1* (PILOT with Decreasing Subsidy Level)	OPTION 2* (NARMA with Fixed Subsidy Level)
Benefits-costs (NPV in million GEL)	-89.0	-65.5	-67.2	-71.9
Effectiveness 1	++	+++	++	+++
Effectiveness 2	+	+	+	+
Effectiveness 3	++	+++	++	+++
Feasibility / Ease to comply	++	++	++	++
Minimization of risks associated with the reform	++	+++	++	+++
Maximizations of collateral benefits associated with the reform	++	+++	++	+++
SUMMARY	++	++ /+++	++	++ /+++

CONCLUSION

CONCLUSION

- Penetration rate by 2025: **13.9%** (Pilot) and **14.3%** (NARMA)
 - **NARMA with fixed subsidy: 18.5%**
- Budget cap of 10 million GEL is not recommended
 - Small farmers better off with NARMA
 - Insurance companies better off with Pilot
 - Government better off with NARMA

CONCLUSION

Crucial in achieving the long term government goals:

- Improvement in service quality
- Increase in the public confidence in agricultural insurance
- Providing a stable framework of public support reducing uncertainty for the agents
 - Systemic approach
 - Long-term government commitment
 - Stable subsidy scheme

Thank you!

Presentation was prepared by:

ISET Policy Institute,

Agricultural Policy Research Center (APRC)

<http://www.iset-pi.ge/>

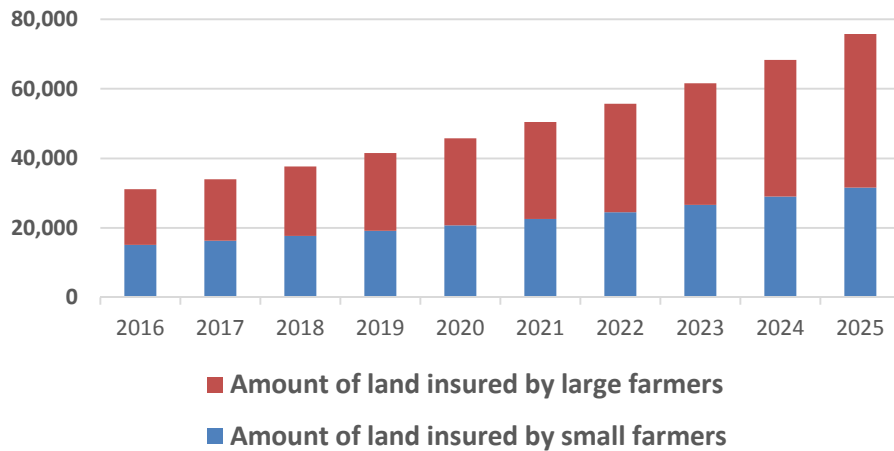
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ANNEX

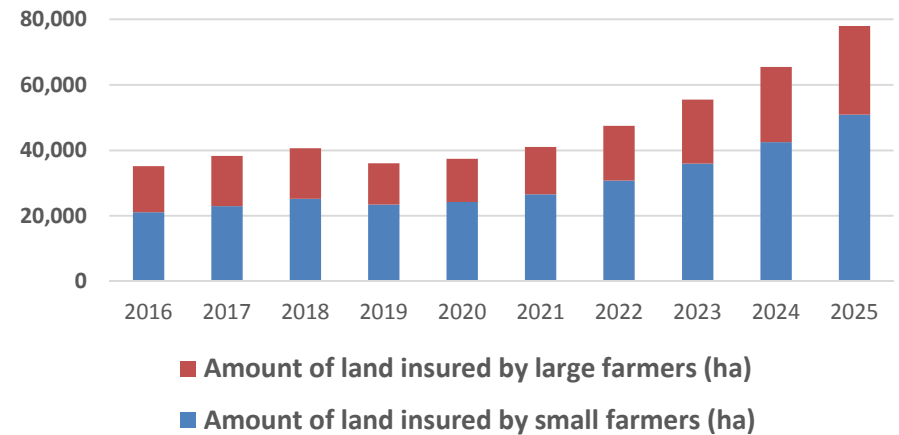
RESULTS

Predicted demand for agricultural insurance

Amount of land insured (Option 1)



Amount of land insured (Option 2)



RESULTS (Option 1)

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
# of small farmers insured	31'501	34'067	36'869	39'936	43'298	46'990	51'056	55'544	60'511	66'027
# of large farmers insured	804	887	1'004	1'122	1'253	1'400	1'567	1'756	1'974	2'213
Amount of land insured by small farmers (ha)	15'080	16'308	17'649	19'117	20'726	22'494	24'440	26'589	28'967	31'607
Amount of land insured by large farmers (ha)	16'031	17'686	20'027	22'372	24'989	27'928	31'248	35'027	39'366	44'149
Penetration rate in terms of land	5.7%	6.3%	6.9%	7.6%	8.4%	9.3%	10.2%	11.3%	12.6%	13.9%
Penetration rate in terms of farmers	4.5%	4.8%	5.2%	5.7%	6.1%	6.7%	7.3%	7.9%	8.6%	9.4%

RESULTS (Option 2)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
# of small farmers insured	44'102	47'864	52'713	48'890	50'665	55'552	64'231	75'094	88'820	106'389
# of large farmers insured	703	771	772	636	658	723	838	978	1'150	1'355
Amount of land insured by small farmers (ha)	21'111	22'912	25'234	23'404	24'253	26'593	30'747	35'948	42'518	50'928
Amount of land insured by large farmers (ha)	14'027	15'378	15'402	12'681	13'122	14'413	16'712	19'508	22'939	27'018
Penetration rate in terms of land	6.5%	7.0%	7.5%	6.6%	6.9%	7.5%	8.7%	10.2%	12.0%	14.3%
Penetration rate in terms of farmers	6.2%	6.7%	7.4%	6.8%	7.1%	7.8%	9.0%	10.5%	12.4%	14.9%

RESULTS

INDICATORS	OPTION 1 (PILOT with Fixed Subsidy Level)	OPTION 2 (NARMA with Decreasing Subsidy Level)	OPTION 1* (PILOT with Decreasing Subsidy Level)	OPTION 2* (NARMA with Fixed Subsidy Level)
Benefits – costs (NPV) (in million GEL)	-89.3	-65.5	-67.2	-71.9
NPV of net benefits for the small farmers (in million GEL)	23.6	33.1	19.6	39.0
NPV of net benefits for the large farmers (in million GEL)	29.1	2.5	20.2	5.0
NPV of the insurance companies (in million GEL)	60.8	34.0	46.2	37.6
NPV of the Government (in million GEL)	-202.8	-147.2	-153.2	-167.4
NPV of NARMA (in million GEL)	-	12.1	-	13.9
Penetration rate in terms of land	13.9%	14.3 %	8.9%	18.5%