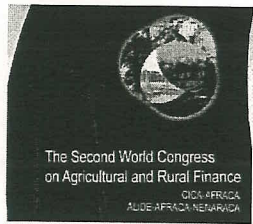


FIRA
FORO MUNDIAL DE INSTITUCIONES DE RELACION CON LA AGRICULTURA

ALIDE



The Second World Congress
on Agricultural and Rural Finance
CICA-AFRICA
ALIDE-APRACA-NEHARACA

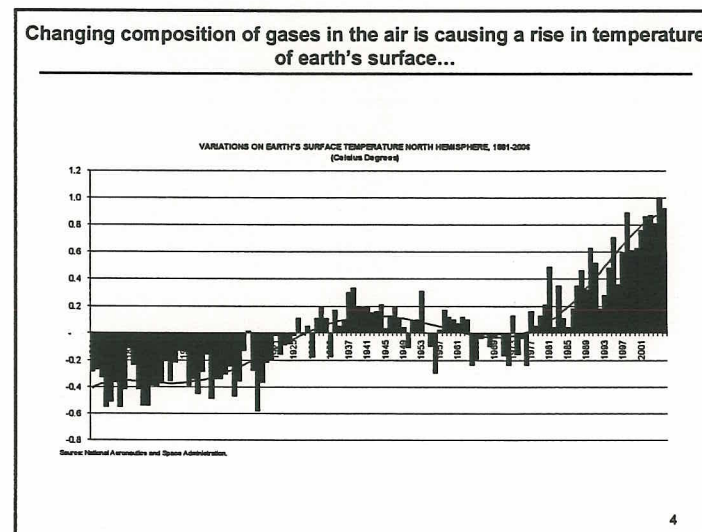
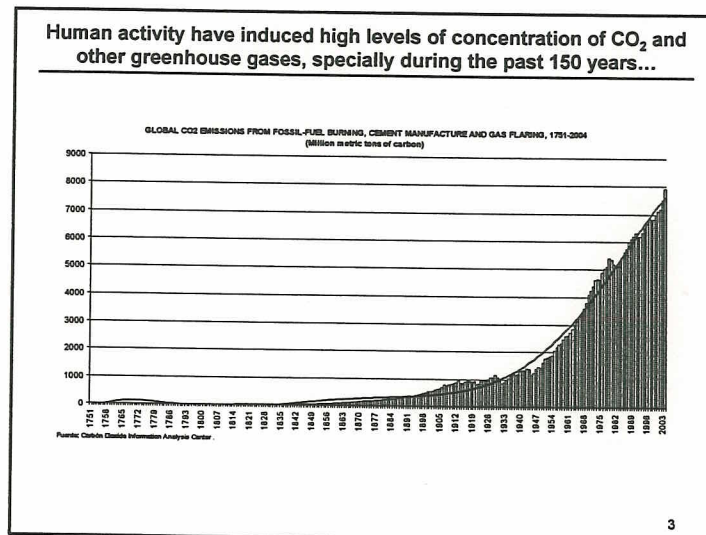
Implications of Climate and Environmental Changes for Rural Financial Institutions

November 1st, 2007

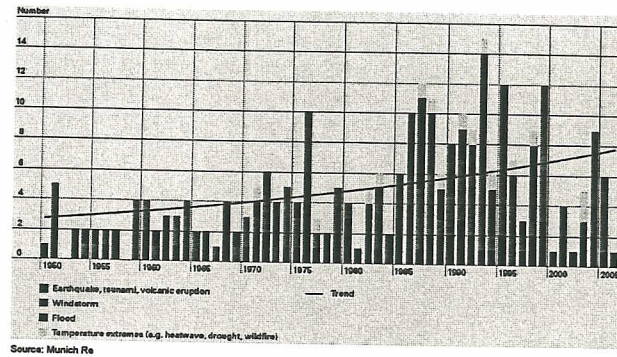
AGENDA

- Climate Change
- Economic Implications
- FIRA's Mission
- Strategies for Rural Financial Institutions
- Concerns, Risks and Potential Opportunities

2

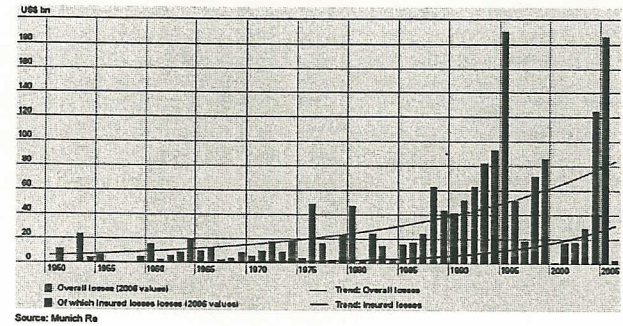


Global warming is generating natural catastrophes and the trend is increasing...



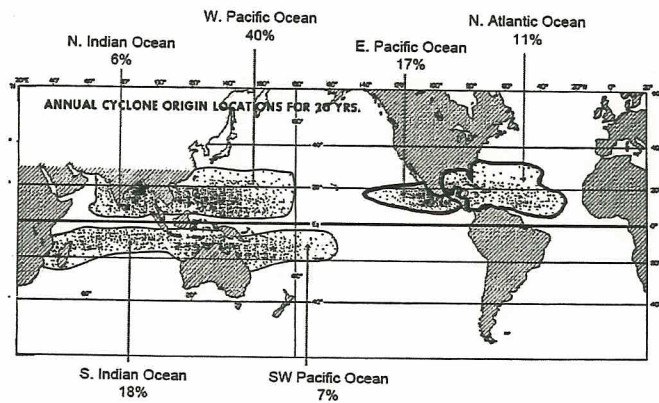
5

Natural disasters mean a large amount of economic losses, specially when there are no insurance schemes...



6

One of the main weaknesses of the Mexican territory is that it is located within a region of high cyclonic activity



7

Mexican government has a global strategy in order to reduce adverse effects of climate change...

- Generating electricity with renewable energy sources.
- Introducing sustainable produced bioenergy.
- Throughout reforestation and recovering forest land.
- Increasing surface of commercial plantations.
- Promoting conversion of agricultural land into perennial cultivations.
- Captioning carbon in grazing lands.

8

Alternative public policies could be implemented in Mexico related to the agricultural sector...

- Promoting research and development of technologies.
- Fiscal incentives and soft credits.
- Financing technical assistance to develop bioenergy projects.
- Severe schemes of sanctions for polluting activities.
- Availability of information to promote business opportunities related to bioenergy.

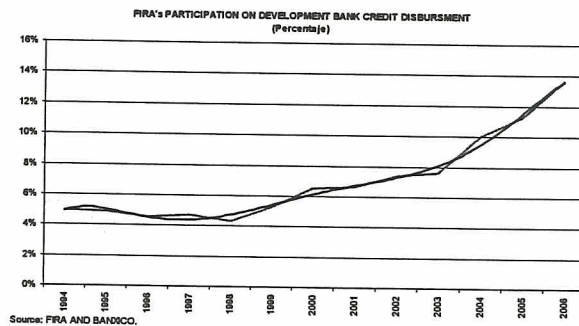
9

For 52 years, FIRA has been the main financing source for agribusiness in Mexico...

- Second-tier Government owned fund managed by the Central Bank.
- Provides funding and credit guarantees to the banking system to finance agribusiness.
- FIRA's total funding in 2006 reached \$5.3 US billion; additionally, it provided \$1 US billion in guarantees.
- During the period 1998-2006, FIRA's total funding to small producers had a real average increase per year of 15.5%, benefiting more than 770,000 producers, per year.
- In 2006, FIRA provided \$14 US million for technical assistance that benefited more than 162,000 producers.

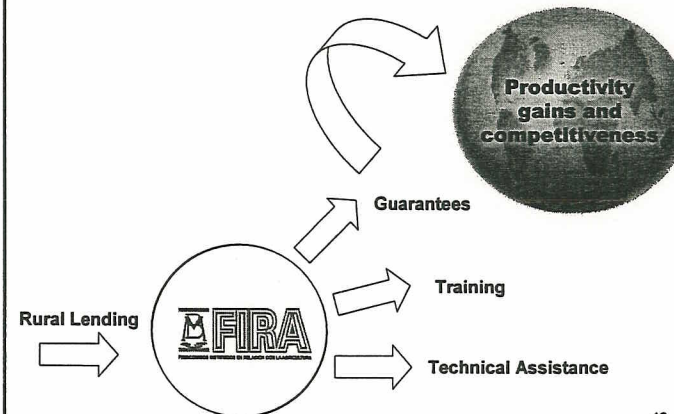
10

Despite economic crisis in the past, FIRA's participation in financial markets has been increasing...



11

FIRA programs are designed to promote integral development of Mexican rural producers...



12

Rural lending Institutions can address climate change from three different perspectives...

- Mitigation ⇒ To promote measurement and reduction of their own direct and indirect CO2 emissions.
- Adaptation ⇒ Incorporating climate change considerations into their own policies.
- Innovation ⇒ Find investment opportunities in climate change related projects and producers with clean technologies.

Climate change and Global Warming present specific threats for rural financing institutions...

- Financial institutions will face asset and liability management mismatches.
- Change in weather patterns and recurrence in catastrophes will expose producers to a higher levels of risk.
- Under uninsured scheme agriculture is specially sensible to weather changes.
- The default from a borrower is without any doubt the most important risk that a bank faces.

Nonetheless, it is possible to mitigate potential threats generating diverse profitable investment opportunities...

- In order to take advantage of the changing business environment it is mandatory to implement risk management practices specially insurance schemes.
- Some examples in primary and rural sector are:

TRADITIONAL	REVENUE ORIENTED
Livestock Risk Protection (LRP)	Crop Revenue Coverage (CRC)
Avocado Revenue Coverage	Indexed Income Protection (IP)
Livestock Gross Margin (LGM)	Adjusted Gross Revenue Lite (AGR-Lite)
Aquaculture Dollar	Income Protection (IP)
Actual Production History (APH)	Adjusted Gross Revenue (AGR)
Dollar Amount of Insurance	Group Risk Protection Income Protection (GRIP)
Grower Yield Certification Span (GYC Span)	Group Risk Plan (GRP)
Tobacco - Quota	Tree Based Dollar Amount of Insurance
Grower Yield Certification (GYC)	Pecan Revenue
Tobacco - Guaranteed Production	Revenue Assurance (RA)
Fixed Dollar	

The agricultural insurance is becoming one of the world's most important issues...

Most Studied Cases	Subsidies	Private Sector Participation	Development of New Products
USA	✓	100%	✓
Mexico	✓	Public / Private	✓
Spain	✓	Syndicated Scheme	✓
Central America (i.e. Guatemala)	✓	100%	✓
Brazil	✓	Public / Private	✓
Chile	✓	100%	✓

▪Agricultural insurance is a basic instrument applied by the agricultural markets in developed countries such as the US.

▪This issue has become increasingly important in Latin American countries (i.e. Brazil, Argentina, Chile, Peru, Guatemala, Honduras, and El Salvador).

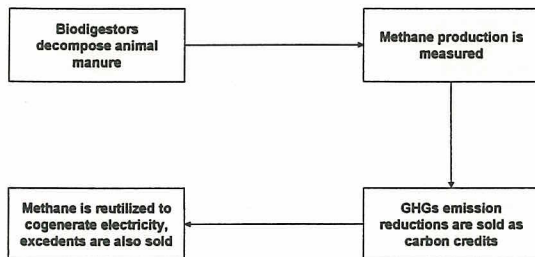
▪Mexico is the most advanced developer of agricultural insurance in Latin America.

▪All successful agricultural insurance models have been those implemented by the private sector and mutual insurance societies.



Furthermore, Kyoto's protocol had opened a wide range of investment prospects throughout Clean Development Mechanism projects...

- An example of those projects is in Tizayuca Hidalgo, México...



17

AFIRA
FINANCIEROS INSTITUCIONES EN RELACION CON LA AGRICULTURA

ALIDE

The Second World Congress
on Agricultural and Rural Finance
CÁMERA AFIRCA
ALIDE AFRICA NEIARACA

Implications of Climate and Environmental Changes for Rural Financial Institutions

November 1st, 2007