BRAZILIAN PERSPECTIVES ON BIOFUEL PRODUCTION

SÃO PAULO STATE

MONIKA BERGAMASCHI

SECRETARY OF AGRICULTURE AND FOOD

SÃO PAULO STATE GOVERNMENT

BRAZIL
WORLD POPULATION OVER 7 BILLION

MAINLY IN DEVELOPING COUNTRIES

IMPACT ON ENVIRONMENT IS LARGER

SOMETIMES THE USE OF TECHNOLOGY IS VERY LOW

PROBLEMS OF

HEALTH

EDUCATION

INFRAESTRUCTURE
INCREASES THE DEMAND

FOOD
FIBER CROPS
ENERGY

PROBLEMS FOR

SOIL/LAND OCCUPATION
TECHNOLOGY
WATER
HUMAN RESOURCES
BRAZIL INCREASED THE PRODUCTIVITY

THE ENERGY PRODUCTION

FIBER CROPS

WITHOUT INCREASE THE PLANTED AREA

INCREASING THE PRODUCTIVITY
FAMILIAR AGRICULTURE SYSTEM

- HIGHLY ORGANIZED- COOPERATIVES
- ACCESS TO GOVERNMENTAL SUPPORT- INSURANCE- TECHNOLOGY-( FEAP-SP)
- BETTER ACCESS TO CONSUMERS
- BETTER POLITICAL( GOVERNMENT POLICY)
- MOST HAVE A SUSTAINABLE AGRICULTURE SYSTEM
- SUPPORT FROM RESEARCH INSTITUTIONS ANS EXTENSION SERVICE
LARGE SCALE FARMERS

- RESEARCH-( AGRICULTURE-SUGAR CANE-ETHANOL- BIOMASS)
- TECHNOLOGY
- INOVATION PROCESS
- PUBLIC AND PRIVATE INSTITUTES AND ENTERPRISING
- LOW CARBON AGRICULTURE SYSTEM (ABC) : direct planting / no tillage, ILPF
- WATER CONSERVATION –SOIL
- WATER RE-USE PROCESS
SÃO PAULO

BIOENERGY

ETHANOL
BIO=ELECTRICITY

BIODIESEL PROCESS- ESPECIFIC CROPS:
LEGUMINOSAE - SUGAR CANE
SUGAR CANE

- SP STATE AREA: 25 million ha
- 5.4 million ha with SUGAR CANE
- TOTAL POTENTIAL -7.8 million ha
- NEW AREAS – based on degraded areas – pasture areas very improdctives
AGRONOMY PROCESS

NEW AREAS= FOOD =SOYBEAN= PEANUTS

NON-BURNING PROCESS- SOIL COVER-
(MOISTURE-FAUNA-FLORA IN THE SOIL)

INCREASE BIOMASS PRODUCTION

PRECISION AGRICULTURE

USE OF WASTE PRODUCTS-
- FERTILIZIER- VINHAÇA + FILTER CAKE-WATER RETURN TO THE SOIL

BIOLOGICAL CONTROL OF PESTS AND DISEASE
KEEP CARBON IN THE SOIL
OTHERS ASPECTS

REQUALIFICATION OF PERSONAL AREAS NOT MECHANIZED- NEW DEFINITION OF USE

FRUITS

MEDICAL CROPS

HEVEA-RUBBER TREE
AGENCIES INVOLVED

RESEARCH-APTA

EXTENSION- CATI

UNIVERSITIES

PUBLIC-PRIVATES INSTITUTIONS

COOPERATION PARTNERSHIPS

TECHNOLOGICAL INOVATION PROCESS
SOME NEW CROPS

CASSAVA
FORESTY- TIMBER- ENERGY- WATER PRODUCTION
SUNFLOWER
CANOLA( Rape seed- colza)
CASTOR OIL
JATROPHA
POLITICAL PROGRAMS

SUPPORT THE NEEDS

TAX REDUCTION-
INCREASE CONSUME BY THE POPULATION

TAX TO BE ORIENTED TO BIO-ENERGY PROCESS

ETHANOL AND BIODIESEL IN BUS- CARS
STATE PROGRAM ON CLIMATE CHANGE

REDUCE CO2 OR GHG EMISSION IN 20% BASED ON 2005 EMISSIONS
THANK YOU