ANEC Presentation

ACCI – MICI

For modernization of the countryside with campesinos and without GMOs
GENERAL INFORMATION

• Constituted: 8 September 1995.
• Non-profit civil society association.
• 60,000 small and medium producers of basic grains.
• Self-managed operation and administration of 220 storage units.
• Harvest and commercialization of:
  • 600,000 tons of corn
  • 200,000 tons of sorghum
  • 40,000 tons of wheat
  • 45,000 tons of beans
  • 20,000 tons of rice
I. Defense and promotion of small and medium scale campesino agriculture and family farms.

II. Promoting the development of fair, inclusive, truly competitive and socially responsible agri-food markets.

III. Promotion and defense of the country’s food sovereignty and the population’s right to food.

IV. Defending and valuing territorial resources in favor of campesinos.

V. New model of food and farming/new deals between the State/rural/urban society.
Overview of ANEC

MODELO ANEC

Productores (as)
Socios (as)

Organización Local
Primer Nivel

Organización Regional
Segundo Nivel

Organización Nacional
Tercer Nivel

INTEGRADORA ESTATAL O REGIONAL (ARIC, S.A.)

COMERCIALIZADORA ESTATAL O REGIONAL (ARIC, S.A.)
Reach and presence

1 National Campesino Organisation

10 Regional organisations

220 local organisations

60,000 campesin@s; Small producers of basic grains (corn, beans, wheat, rice and sorghum).
## STORAGE CAPACITY BY STATE

<table>
<thead>
<tr>
<th>Núm</th>
<th>State</th>
<th>Storage Capacity (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chiapas</td>
<td>42,500</td>
</tr>
<tr>
<td>2</td>
<td>Chihuahua</td>
<td>18,800</td>
</tr>
<tr>
<td>3</td>
<td>Guanajuato</td>
<td>49,000</td>
</tr>
<tr>
<td>4</td>
<td>Guerrero</td>
<td>1,000</td>
</tr>
<tr>
<td>5</td>
<td>Jalisco</td>
<td>16,000</td>
</tr>
<tr>
<td>6</td>
<td>Michoacán</td>
<td>66,900</td>
</tr>
<tr>
<td>7</td>
<td>Morelos</td>
<td>1,000</td>
</tr>
<tr>
<td>8</td>
<td>Nayarit</td>
<td>36,000</td>
</tr>
<tr>
<td>9</td>
<td>Puebla</td>
<td>10,000</td>
</tr>
<tr>
<td>10</td>
<td>San Luis Potosí</td>
<td>300</td>
</tr>
<tr>
<td>11</td>
<td>Tamaulipas</td>
<td>48,000</td>
</tr>
<tr>
<td>12</td>
<td>Zacatecas</td>
<td>2,400</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>291,900</td>
</tr>
</tbody>
</table>
WHAT DOES THE NEW GOVERNMENT PROPOSE ON AGRICULTURE?

25 Priority Programs under the AMLO Administration

1. Definition of a future new International Airport for Mexico.
2. Development of the isthmus region through a cargo train and fiscal facilities for business development.
3. Construction of the Mayan Train with the Cancun-Tulum-Bacalar-Calakmul-Tenosique-Palenque highway.
4. Improvements in rural roads with intensive use of labor, especially in Oaxaca.
5. Broadening internet coverage throughout the country.
7. Urban development in marginalized neighborhoods, including those located in the Chimalhuacan, Chalco, Valle de Chalco and Ecatepec municipalities in the state of Mexico.
10. Planting one million hectares of trees for fruit and wood.
11. Scholarships of 2,400 pesos per month for university students and 3,600 pesos for business apprentices.
12. Scholarships for all high school students.
13. Opening 100 public universities in marginalized areas.
14. Support for key crops to achieve food sovereignty.
15. Rehabilitation of a publicly owned fertilizer company.
16. Establishment of a basic food basket.
17. Granting credit to cattle ranchers without collateral.
18. Free trade zone along the northern border with an 8% VAT and a 20% income tax, as well as energy prices consistent with those in the U.S. and a doubling of the current minimum wage.
19. Support for mining development.
20. Support for small and medium-scale enterprises.
21. Increase in oil and gas production and strengthening of PEMEX.
22. Modernization of the six existing refineries.
23. Construction of a refinery in Dos Bocas, Paraíso, Tabasco.
24. Development of alternative electric and energy infrastructure with support from the Federal Electricity Commission.
25. Free medical attention and medicines for the entire population.
**Ejes de acción para el campo.**

Lograr la soberanía alimentaria, a través de:

1. **Mejorar la** productividad para una mayor producción.

2. **Mayor Inclusión** de tipos de agricultura y productores.

3. **Sustentabilidad**, para el aprovechamiento responsable de los recursos.
PRIORITARY PROGRAMS

Programas SADER 2019

- Concurrencia y sinergia para la aplicación de programas.
- Ahorros.
- Enfoque integral.
- Prioridad de atención a zonas de menor desarrollo.
- Balance regional.
- Eliminación de intermediarios.
- Fortalecimiento de cadenas de valor.
- Oportunidad en apoyos.
- Búsqueda de autosuficiencia y soberanía alimentaria.
SOCIAL MOVEMENTS AND THE NEW GOVERNMENT
4 pillars of the 4th Transformation

MEXICAN GOVT AMLO
MORENA
MEXICAN CONGRESS
SOCIAL MOVEMENTS
SOCIAL MOVEMENTS AND THE NEW GOVERNMENT

- Clarity of the current political historical context in Mexico
- Promote and radicalize our strategy of struggle and proposals.
- Strategic alliances with different movements.
- Historic opportunity to achieve goals desired for years.
- No support for intermediaries.

Allies...
- Campesino, Indigenous and Afromexican Movement “21st Century Plan de Ayala”.
- Without Corn No Country campaign.
- Collective Action demands corn.
- Mexican Agroecology Movement.
- Valor al Campesino.
- Others
I. Principal productive theme*: reinforce positioning and advance in the construction of the network of value from the strongest link (for us) and on the basis of the 4 pillars: productivity, competitiveness, profitability and sustainability.

*Basic grains, fruits, vegetables, etc.
Seeking an alternative model of sustainable agriculture: small and medium scale, high productivity, low carbon emission and high climatic resilience

- After 30 years of abandonment of peasant agriculture and following the global food crisis of 2008/09, national governments and international organizations recognize the need to achieve food self-sufficiency based mainly on the revaluation and productive development of small and medium agri-food production units.

- Reasons: New paradigm in international agricultural markets:
  1) High prices and great volatility.
     Main cause: subordination of agricultural markets to financial and hydrocarbon markets (food crops → feed crops → fuel crops);
  2) Global climate change;
  3) Planetary demographic growth and the demand from the BRICs;
  4) Drop in international agricultural productivity/depletion of the green revolution model.
  5) Oligopolization of international agricultural markets.
Exhaustion of the green revolution and contributions / limits of organic agriculture

- We need an alternative model to the model of industrial agriculture/green revolution: it is exhausted, it is unsustainable, it is counterproductive, it is pernicious.
- Organic agriculture has made many contributions, but has limits that need to be overco

The current organic agriculture model is:
- **Closed** - organic technological *package* - subject to external certification and high cost.
- **Exclusive**: organic products for a first world elite and hyperindustrialized foods, conventional, junk low nutritional content for organic producers and their families, and for the rest of the population.
- **Stagnant**:
  a) It has not incorporated the scientific and technological advances of the last century;
  b) It has not faced the problem of low productivity and income of small and medium producers; and
  c) It has not dealt with the impacts of global climate change.
- **Refunctionalized**: the majority of organic agriculture (and its certifiers) has been refunctionalized and increasingly controlled by large corporations.
A paradigmatic change in the model of agriculture is required, within the framework of the **construction of a new agri-food and nutritional system**.

And a **new long-term public policy based on the principles of:**
- i) food sovereignty;
- ii) sustainability;
- iii) productivity;
- iv) profitability;
- v) low carbon emissions;
- and vi) high climate resilience.

It is necessary to move from "an agriculture of inputs" to an "agriculture of knowledge integrated in complex processes" based on small and medium-sized units of rural production.

It is a true technological and social revolution: the only way to achieve self-sufficiency and food security and a dignified life for the country’s campesinos and rural communities.
Challenges

With the new technological revolution it is possible to achieve multiple results in the short and medium term:

1. Significantly boost sustainable agricultural productivity in the short term.
2. Drastically reduce production costs and increase profitability.
3. Regenerate the soil, protect natural resources and promote agriculture that is low in carbon emissions.
4. Produce healthy foods with higher nutritional quality for local consumption and the national market.
5. Revalue peasant work and rural ways of life.
6. Reactivate the agricultural and rural economy.
7. Rebuild social cohesion on family, community and ethnic levels.
8. Provide decent employment and income opportunities for rural youth.
9. Lessen the negative impacts of climate change, and provide the best strategies for adaptation to it.
10. And above all, ensure self-determination in the country’s food, economic and technological and long-term food security.

New Technological Revolution for the Productivity, Sustainability and Resilience of Crops

From an Agriculture of Agrochemicals to a Campesino Agriculture of Integrated Knowledge
P1. Campesino women and men are productive actors, subjects of rights and carriers of relevant agricultural knowledge.

P2. The self-managed campesino organization is the collective subject of the new technological revolution.

P3. Integrated knowledge in the service of a new model of sustainable agriculture.


P5. Training/continuous professionalization from “farmer to farmer" and from "scientist to farmer and from farmer to scientist".


P7. Need for a revolution of conscience, values and attitudes.

P8. Sovereignty and Public Policy to build a different agri-food and nutrition system.

Soberanía y Política de Estado para construir otro sistema agroalimentario y nutricional.
Roots of the Campesino Integrated Knowledge Model (ACCI)

Integration of social, economic, environmental and cultural objectives

Centered on defense of campesino agriculture

Science applied to campesino agriculture with social & nationalist commitment in the field (use of new technologies)

Management of agricultural ecosystems

Model of technology transfer and campesino professionalization

Comprehensive services in the production-marketing chain

Studied, made visible and valued masterfully by the teacher Efraín Hernández Xolocotzi

Great contributions to productivity and adaptation of food crops with countless world-class geneticists
Integrated Management of Induced Crops (MICI)

I. Continuous analysis of soil, water, tissues (physical-chemical-microbiological)

II. Soil cultivation / Re-establishment of physical-chemical-biological equilibrium (MOO)
Soil oxygenation, Organic Matter Enrichment MO, Inoculation of MOO consortia / invasive dose / selective dose

III. Cultivation practices
Soil preparation, Crop association, Crop rotation, Cover crops

IV. Plant nutrition
Pre-seeding: lumbricompost, efficient MOO, macro fertilization / chemical microelements, foliar fertilization (leachate).

V. Plant Resistance to Stresses
Integrated management of pests and diseases, Management of abiotic stresses

VI. Induction of productive and vegetative development
Inducers to increase production via acceleration / delay / increase in cell division, maturation

VII. Knowledge and use of climate climatological information at the local level
Local weather stations, weather information regional / national, and meteor forecast and prevention

VIII. Protection and improvement of seeds
Mass selection of native seeds, Local production of hybrid and synthetic seeds, Selection and treatment of seeds

IX. Local Production of Bio-inputs and Knowledge
Biofactories, Lumbicompost modules, Meteorological stations
Local Level

**HUMAN RESOURCES**
- PRODUCER
  - FULL TIME FIELD TECHNICIAN

**LOCAL ORGANIZATION**

**TEAMS**
- MULTIPARAMÉTRIC
- MICROSCOPIC
- WEATHER STATION

**PRODUCTION OF INPUTS**
- LUMBRICOMPOST Y LIXIVIADOS
- REPRODUCTION OF MICROORGANISMS AND PRODUCTION OF VEGETABLE BIOLES AND EXTRACTS
- SEED PRODUCTION
Technological revolution *with* campesinos *and without* GMOs:

*from agriculture of inputs to agriculture of knowledge integrated into complex systems*

**Paradigm Change/4 pillars**

1. **BIOLOGICAL**
   - Nutrition
   - Microbiology
   - Plant Resistance
   - Edaphology

2. **ECONOMIC**
   - Production
   - Commercialization
   - Consumption

3. **ORGANIZATION**
   - Governance
   - Integrated Services
   - Systems of Control

**Dynamic cycles**

- Ancestral Campesino Knowledge
- Applied Scientific Knowledge

**ACC/MIC**

- National Org.
- Regional Org.
- Local Org.
- Farmer

- Soil (Living ecosystem, not inert substrate)

- Planetary Climate

- Air

- Water

- Economic, Political, and Social System
Model of training and socialization of capacities in the ACCI-MICI model.
### Crop phenology/Integrated management practices

<table>
<thead>
<tr>
<th>Altura de Planta (cm)</th>
<th>Tratamiento de la semilla</th>
<th>Emergencia</th>
<th>Crecimiento Vegetativo lento</th>
<th>Crecimiento Vegetativo rápido</th>
<th>Emisión de panoja, desarrollo de mazorca</th>
<th>Crecimiento de mazorca</th>
<th>Maduración</th>
<th>Senescencia</th>
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</tbody>
</table>

**Etapas Fenológicas:**
- **Ve:** Vegetative emergence
- **V1:** 1st vegetative leaf stage
- **V2:** 2nd vegetative leaf stage
- **V3:** 3rd vegetative leaf stage
- **V4:** 4th vegetative leaf stage
- **V5-V6:** Transition from vegetative to reproductive growth
- **V7-V10:** Early flowering
- **VT:** Tasseling
- **R1-R2:** Ripe silks
- **R3-R4:** Ripe grain
- **R5-R6:** Harvest
- **S:** Harvest

**Unidades Calor (10^6 °C-days):**
- 109.4
- 180
- 220
- 280
- 316.4
- 502
- 576
- 665
- 823
- 978
- 1451
- 1640

**Consumo de Agua (mm):**
- 7.1
- 10
- 15
- 18
- 21.6
- 35
- 52.2
- 39
- 67
- 83
- 20.8
- 8.9

**Fecha:**
- Jun-16
- 02-Jul-16
- 08/07/2016
- 14/07/2016
- 20/07/2016
- 01-agos-16
- 14-agos-16
- 26-agos-16
- 01/09/2016
- 21-sep-16

**Actividades:**
- Oxigenadores de Suelo.
- Inoculación de la semilla.
- Aplicación de microorganismos, fijadores y solubilizadores de Nutrientes.
- Monitoreo de Plagas.
- Enfermedades y microorganismos enraizadores.
- Supermagro, lixiviado y microorganismos enraizadores.
- Nutrición balanceada en drench y fertilización foliar.
- Promotores de crecimiento 1 y 2d cultivo.
- Aplicación de resistencia vegetal 1 y 2d cultivo.
- Nutrición balanceada en drench.
- Aplicación de Inductores de Resistencia Vegetal y promotores de crecimiento.
- 3a Nutrición balanceada 2a.
- Estimación de rendimiento.
- Cosecha.
### Insumos requeridos en el Modelo ACCI - MICI

<table>
<thead>
<tr>
<th>Etapa</th>
<th>Insumos</th>
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<tbody>
<tr>
<td>Preparación del Suelo</td>
<td>Aplicación de oxigenadores sólidos</td>
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<tr>
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<td>Aplicación de oxigenadores líquidos</td>
</tr>
<tr>
<td></td>
<td>Microorganismos degradadores de materia orgánica</td>
</tr>
<tr>
<td></td>
<td>Aplicación de Microorganismos Fijadores de Nitrógeno</td>
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<tr>
<td></td>
<td>Aplicación de Microorganismos antagónicos y solubilizadores de nutrientes</td>
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<td>Aplicación de Microorganismos entomopatógenos</td>
</tr>
<tr>
<td></td>
<td>Microorganismos promotores de crecimiento</td>
</tr>
<tr>
<td>Nutrición Foliar</td>
<td>Lixiviados enriquecidos</td>
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<tr>
<td></td>
<td>Supermagro</td>
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<tr>
<td>Resistencia Vegetal</td>
<td>Inductores de Resistencia Vegetal</td>
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<tr>
<td>Productividad</td>
<td>Fitohormonas</td>
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<tr>
<td>Manejo Fitosanitario</td>
<td>Feronas (trampas)</td>
</tr>
<tr>
<td></td>
<td>Microorganismos antagónicos y entomopatógenos</td>
</tr>
<tr>
<td></td>
<td>Extractos vegetales</td>
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</tbody>
</table>
### Role of Microorganisms utilized in the ACCI – MICI model

<table>
<thead>
<tr>
<th>Domain</th>
<th>Genus</th>
<th>Species</th>
<th>Functions</th>
<th>Nutrition Fixative</th>
<th>Solubilizer</th>
<th>Phytosanitary Management</th>
<th>Entomopathogen</th>
<th>Antagonist</th>
<th>Growth Promotor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteria</td>
<td><em>Bacillus</em></td>
<td><em>subtilis</em></td>
<td></td>
<td>XXX</td>
<td>X</td>
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<td>Fungus</td>
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<td><em>sp</em></td>
<td></td>
<td>XXX</td>
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<tr>
<td>Bacteria</td>
<td><em>Azospirillum</em></td>
<td><em>sp</em></td>
<td>N</td>
<td>PO3, K+, Mn,Mg</td>
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</tr>
<tr>
<td>Fungus</td>
<td><em>Micorrizas</em></td>
<td><em>sp</em></td>
<td>N</td>
<td>P, K, Ca, Zn, Cu,</td>
<td>x</td>
<td>x</td>
<td>x</td>
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</tr>
<tr>
<td>Fungus</td>
<td><em>Beauberia</em></td>
<td><em>bassiana</em></td>
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<td>XXX</td>
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<tr>
<td>Fungus</td>
<td><em>Metarhizium</em></td>
<td><em>sp</em></td>
<td></td>
<td>XXX</td>
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<tr>
<td>Bacteria</td>
<td><em>Bacillus</em></td>
<td><em>thurinhiensis</em></td>
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<td>XXX</td>
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</tr>
<tr>
<td>Bacteria</td>
<td><em>Pseudomonas fluorescens</em></td>
<td></td>
<td>P y K</td>
<td>XXX</td>
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<td>Fungus</td>
<td><em>Lecanicillium</em></td>
<td><em>lecanii</em></td>
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<tr>
<td>Fungus</td>
<td><em>Paecilomyces lilacinus</em></td>
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<td>XXX</td>
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<tr>
<td>Bacteria</td>
<td><em>Rhizobium</em></td>
<td><em>sp</em></td>
<td>N</td>
<td>XXX</td>
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<tr>
<td>Bacteria</td>
<td><em>Pseudomonas putida</em></td>
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<td>X</td>
<td>XXX</td>
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Nueva Revolución Tecnológica para la Productividad, Sustentabilidad y Resiliencia de Cultivos De una Agricultura de Insumos a una Agricultura Campesina de Conocimientos Integrados
**Production of Inputs: In our Biofactories**

**Produces:**
- Seeds
- Compost
- Lumbricompont
- Lixiviados
- Bioles
- Sulfocalcium Broths, Cupric Sulphate
- Plant extracts

**Reproduces:**
- Microorganisms (Fungi y bacteria)

**Prepares:**
- Formulas of Plant Resistance to biotic events (pests and diseases and abiotic diseases (drought, excess humidity, hail, excessive radiation, lack of cold hours, frost))
- Rock flours
The diversity of native maize in the region has a high potential in:

- Increase in yield through selection and participatory improvement in white maize (Tuxpeño, Rocamey, 507, Chapín, Zapatista).

- Harvesting and improvement of yellow corn (Olotillo amarillo, Oro, Olotillo–Vandeño).

- Differentiated markets for special-purpose corn (Olotillo negro, Napalú).

Variables:
1. Relative humidity (%)
2. Average maximum, minimum temperature (ºC)
3. Precipitation (mm)
4. Solar radiation (W/m²)
5. Barometric pressure (hPa/mb)
6. Ultraviolet radiation
7. Wind direction and velocity
8. Lunar phases

Calculations
9. Dew point (ºC)
10. Evapotranspiration (mm)

Variables in the soil:
11. Humidity (%)
12. Temperature (ºC)
Equipos de Medición de Variables climatológicas

UNIVERSO
8 ESTADOS
20 MUNICIPIOS
23 MODULOS

NAYARIT
TECAUA
SAN PEDRO LAGUNILLAS
SANTA MARIA DEL ORO
JALISCO
ETZATLAN
AMECA
UNION DE TULA

MICHOACAN
IXTLAN
CHAVINDA
VILLAMAR
ZINAPECUARIO

MORELOS
YECPIXTLA

PUEBLA
TECAMACHALCO

GUERRERO
AZOPI
OMETEPEC

CHIAPAS
(MUNICIPIOS)
VILLA DE LAS FLORES
EL PARRAL
VENUSTIANO
CARRANZA
LA CONCORDIA

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NOAA, U.S. Navy, NGA, GEBCO
US Dept of State Geographer
Image Landsat / Copernicus

© 2016 INEGI

Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias
Plataforma de Alertas de eventos bióticos y abióticos

Portal de Inicio

Mapas de Riesgo

Prevención y Control

Potencial Productivo

**FICHA TÉCNICA DEL MAÍZ**

Nombre común: Maíz
Nombre científico: Zea mays
Familia: Gramíneas
Género: Zea

Origen

Se estima que la domestificación del maíz ocurrió hace aproximadamente 8000 años (Senz, 1967). Serratos (2006) menciona que aún no es posible precisar el origen del maíz, ya que siguen faltando datos de registros fósiles y arqueológicos, de las pocas exploraciones específicas dedicadas al análisis del maíz en América las más conocidas son las de Tehuacán en Puebla, Qui小龙 in Oaxaca y la Cueva del Muñón en Nuevo México Estados Unidos.
Elaboration of Management Plans with the integration of Information and records

CLIMATOLOGÍA DEL MAÍZ EN TECAMACHALCO, PUEBLA, CICLO PV 2014

- UC Acumuladas
- Radiación Solar ww/m2
- T prom.
- PP

UNIDADES CALOR BIBLIOGRÁFICO
MAX 1.516
MIN 12

UNIDADES CALOR REGISTRADA
MAX 2,066.25
MIN 9.5
Some results

Technological transfer taking as reference the Campesino Model of Integrated Knowledge (ACCI)/Induced Management of Induced Crops (MICI).

- Attention to **600** producers of **cane**, **sorghum** and **corn** and **1,725** hectares of land.
- **23 Moduleos, 1 technician** per module.
- Management Plans and report of visit to properties (logbook).
- Knowledge and specific attention of each crop to attend (nutrition, phenology, pests, diseases, etc.) and application of technological innovations to be transferred.
- **Field visits** with specialists.
Hybrid Corn

Production measured in yield (tons per hectare)

- 444 Producers
- 1,284 Hectares

Profitability measured in cost per ton produced (pesos per ton)

- Conventional: 6.59 ton/ha, $2,912.71 per ton
  - Decrease 30%
  - $912.57 per ton

- ACCI - MICI: 8.66 ton/ha, $2,000.14 per ton
  - Increase 31%
  - + 2.07 ton/ha
Creole or native corn

Production measured in Yield (tons per hectare)

- 32 Producers
- 89 Hectares

Profitability measured in cost per ton produced (pesos per ton)

Conventional
- 3.23 ton/ha
- $3,334.00 per ton

ACCI-MICI
- 4.12 ton/ha
- $2,941.33 per ton

Increase 27%

- + 0.89 ton/ha

Reduction 11%

- $393.00 Pesos/ton

Production measured in Yield:
- Conventional: 3.23 ton/ha
- ACCI-MICI: 4.12 ton/ha

Profitability:
- Conventional: $3,334.00 per ton
- ACCI-MICI: $2,941.33 per ton

Increase in yield by 27%:
- + 0.89 ton/ha

Reduction in profitability by 11%:
- -$393.00 Pesos/ton

Comparison of Creole or native corn with conventional and ACCI-MICI methods.
**Sorghum**

**Production measured in Yield (tons per hectare)**
- 66 Producers
- 170 Hectares

**Profitability measured in cost per ton produced (pesos per ton)**
- $3,138.36 per ton.
- $2,441.71 per ton.

**Profitability Increase**
- **30%**
- **4.75 ton/ha**
- $3,138.36 per ton.

**Profitability Decrease**
- **28%**
- **3.40 ton/ha**
- $2,391.71 per ton.

**Profitability Change**
- **$696.65 Pesos/ton**
Sugarcane

Production measured in Yield (tons per hectare)

- 58 Producers
- 181 Hectares

Profitability measured in cost per ton produced (pesos per tonda)

- Conventional: $398.73 per ton
- ACCI - MICI: $250.77 Pesos/ton
- Decrease 60%

Increase 40%

- 100 ton/ha
- 40 ton/ha
Conclusions

- There are alternatives. They are in our hands.
- There are no shortcuts or simple solutions.
- It is a matter of rights and sovereignty.
- We must invest 90% of public resources in campesino agriculture and alternative models such as the ACCI model.
- We can and must recover the splendor of Mesoamerican agriculture and civilization in the face of a globalized 21st century.
THANK YOU!!

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