ANEC: agroecological solutions and need for change in agricultural policy

The transition from agrobiotechnology to agroecology in Mexico and the challenges of U.S. trade policy

Institute for Agricultural and Trade Policy (IATP) and the National Association of Rural Producers' Marketing Companies (ANEC).

Wednesday, March 30, 2022
11 a.m.-1 p.m. CDT

The decree banning the planting of genetically modified corn and phasing out the use of glyphosate.
31 Dec 2020

- 21 years of organizational and legal battles of diverse campesino and civil society organizations, environmental and scientific collectives.
- The obligation to revoke and refrain from granting permits for the release of genetically modified corn seeds into the environment.
- Promote and implement sustainable and culturally appropriate alternatives to the use of glyphosate with biological or organic products, and with agroecological or manual labor practices that are safe for human health, the country's biocultural diversity and the environment.

Phasing out the use of glyphosate

The National Council of Science and Technology (CONACYT), to coordinate, articulate, promote and support research and technological innovations that allow it to sustain and propose alternatives to glyphosate.

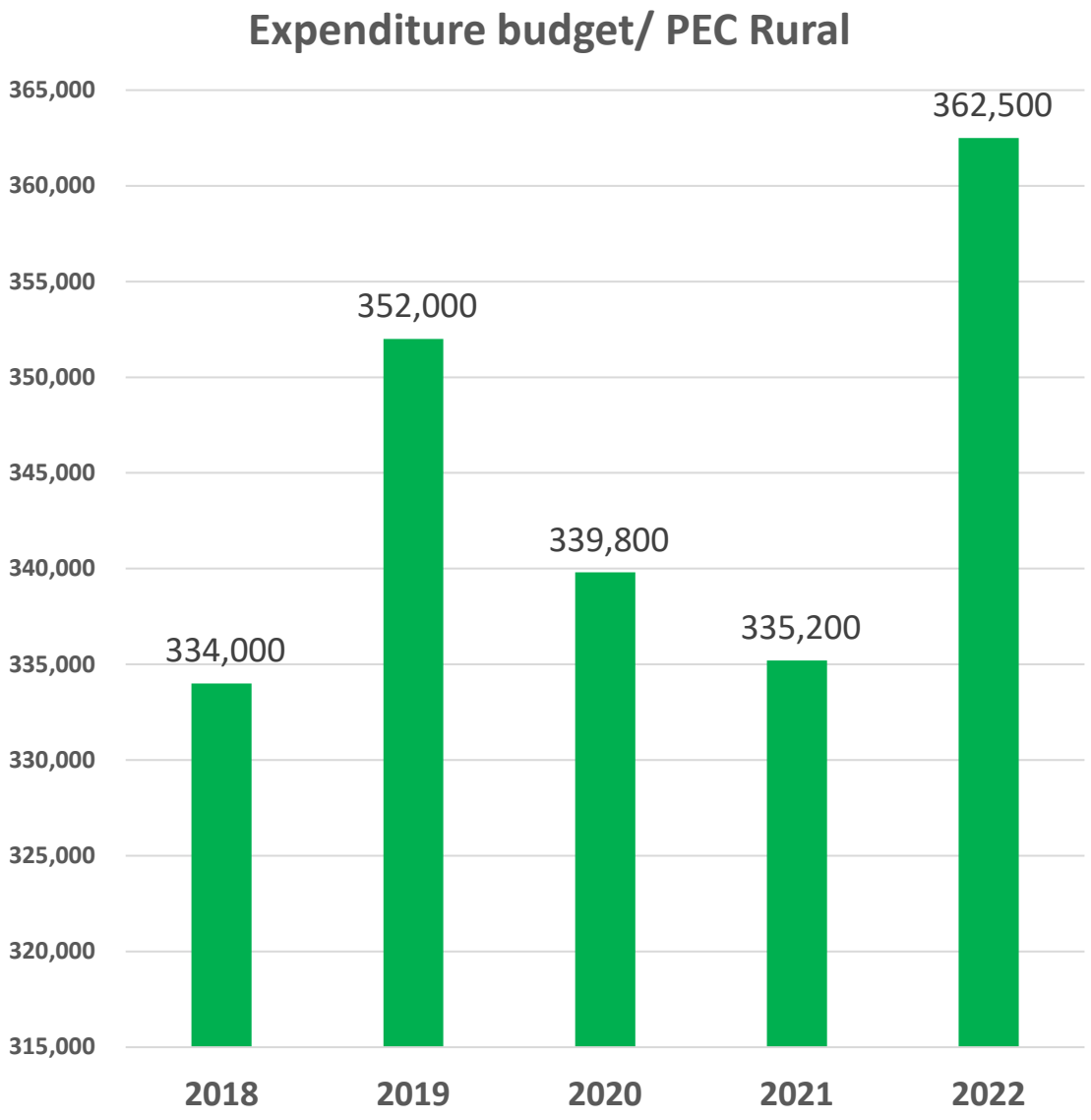
CONACYT shall issue annual recommendations that allow them to support the amount of glyphosate they will authorize for import in the transition period prior to the total elimination of glyphosate in 2024.

Institutions have until the first half of 2023 to promote legal reforms to prevent the use of glyphosate as an active substance in agrochemicals and of genetically modified corn in Mexico.

January 31, 2024 deadline to fully replace glyphosate and refrain from granting authorizations for the use of genetically modified corn grain in the diets of Mexican men and women.

Redirection of public policies from 2019 onwards.

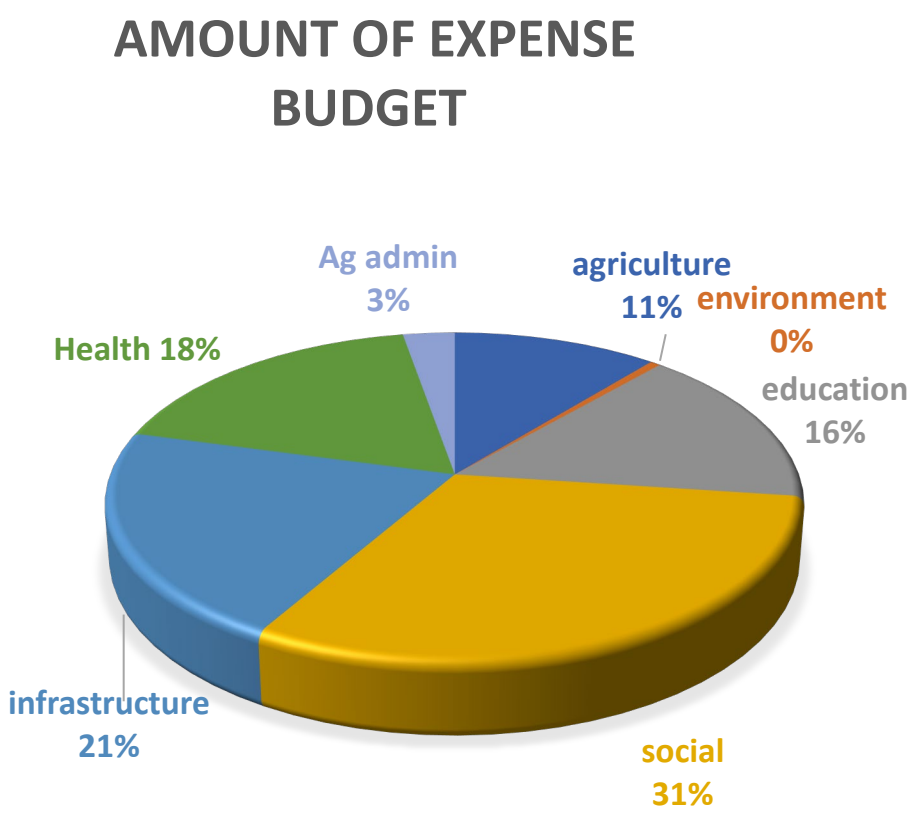
- 2019 declaration on the end of neoliberalism and the need to achieve food sovereignty.
- This implies a profound change in public policies for the countryside.
- Priority to small-scale and southeastern producers and more resources those groups
- Direct support (without intermediation).
- Programs to support sustainable production
- Aserca disappears as regulatory agency and Segalmex enters for guaranteed prices
- Approval of laws, decrees and regulations:
  - Decree for the prohibition of the use of glyphosate and prohibition of the planting of transgenic corn.
  - Law for the protection of native corn.
  - General Food Law, food policies in process
  - Budget Expenditures
  - Triumph of the class action lawsuit against the planting of transgenic corn before the Supreme Court of Justice (precautionary measure against planting).



Budget for promotion of agricultural activities

2022 (trend 2019 - 2022 / 7 programs) 362 thousand mdp

Strategic programs	Amount MDP
SADER Chemical Fertilizers	**2,500 (+)**
Production for welfare SADER	**14,006 (+)**
SADER Guaranteed Prices	**11,373 (+)**
Promotion of agriculture SADER	**1,525 (+)**
Sowing life SEBIEN	**29,231**
Liconsa (food) SADER	3,515
Diconsa (food SADER	3,629
TOTAL	65,779



Context: Which agrifood model do we want?

- The elimination of glyphosate by 2024 is at the center of the debate: it implies the direction that public policies will take in the short and long term for the countryside (end of the green revolution?).
- There are reactions from large agribusinesses and corporate producers, as they see their businesses threatened, supported by key officials embedded in the government, who are in favor of the neoliberal model and have alliances with the private sector (CNA and companies).
- The construction-validation-massification-research of alternatives for a sustainable agri-food model is urgently needed, ranging from the agroecological transition, national, integral, gradual and with stimuli to production and market organization. Food sovereignty.

Agroindustrial model and the role of GMOs versus Food Sovereignty

1. GMOs are based on a technological model designed for imposition and **control at all stages of the** production, marketing and consumption chain, in the hands of agribusiness monopolies.

2. The **uniformity** of this agro-industrial system alters and destroys the natural functioning of ecosystems, increasing their vulnerability, and also breaking the balance of the natural and metabolic interaction of man with nature.

3. It condemns farmers to **dependence on external inputs**, which is highly polluting and harmful to the biosphere and human health in producers and consumers.

4. Due to the high cost of inputs, it also affects **the profitability of campesino production**, generating poverty and rural depopulation, for the benefit and enrichment of a few companies.

5. It is a model of **indiscriminate extraction** that does not consider that the depletion of natural resources is systemic, multifactorial, and puts the future of humanity at risk.

It alters the development of **ecosystem biodiversity, associated cultural diversity, peoples' food systems and ancestral productive culture.**

ANEC, campesino alternatives: Our strengths

- We have a proven, replicable and integrated model (10 years), ACCI - MICI that provides agroecological answers to the needs of producers and agricultural production in the environmental, social, organizational, economic, productive and health areas.
- ACCI MICI has important contributions with respect to one of the major limitations of "traditional" agroecology: profitability, productivity and integrated knowledge of physical, chemical and biological issues. .

ACCI MICI: Strategy to increase the profitability and ensure the sustainability of small-scale agriculture

- Agroecological production model based on family and community organizations and on the economic self-organization of producers;
- Substitution of chemical fertilizers and pesticides (reduction of costs and environmental impacts) for organic inputs;
- Technological innovations and science at the service of producers, with recovery of ancestral practices to recover biodiversity. In-house specialized technical assistance services
- Strategy for the supply of organic inputs resulting from efforts by local farmers' organization

Contributions of the MICI Method (Integrated Management of Induced Crops)

Profitable → Sustainable → Resilient

Profitable: *Reduces production costs and increases yields;*

Sustainable: Its fundamental purpose is to sustain over time the **recovery of the planet's natural resources** (rhizosphere, biosphere, hydrosphere and atmosphere) **and to improve the health** of **society** (consumers, farmers and day laborers).

Resilient: not only is it able to cope with the challenges of climate change, but it identifies and interprets plant signalers that advance human perception of biotic and abiotic effects.

ACCI - MICI

1. It is a method that provides knowledge and alternatives that favor agroecological transition.
2. It integrates both campesino and ancestral knowledge, as well as the latest science and technology, and seeks an overall vision of the crop and its agroecosystem, to promote and encourage its development.
3. Its adoption fosters very favorable conditions for organization.
4. It is designed to recover the role of the small farmer as the main protagonist in the production of healthy foods and goods for society and to stop being merely consumers of inputs, as imposed by the Green Revolution.

Integrated Management of Induced Crops (MICI)

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

II. Soil cultivation/Re-establishment of the physical-chemical-biological balance.

III. Cultural practices. Soil preparation, crop association, crop rotation, cover crops.

IV. Plant nutrition. Pre-seeding: ligno-composting, efficient MOO, macro/microelements fertilization, foliar fertilization (leachates).

V. Plant resistance to pests. Control in integrated pest and disease management, Abiotic stress management.

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

VII. Knowledge and use of climatological information.

VIII. Seed protection and improvement

IX. Local production of bio-inputs and knowledge.

RESULTS OF ANEC'S ACCI - MICI FOR AGROECOLOGICAL TRANSITION

- In 6 years, it has been adopted to varying degrees in 45 ANEC organizations involving approximately 5,300 farmers in about 31,000 hectares in 10 states of the country, in basic grains and perennial crops.
- Results of productivity and soil improvement are seen in a single cycle; overcoming biotic and abiotic stresses in a short period, due to the nature of the knowledge and bio-inputs used. (organic matter, nourishment)
- Through continuous training and practice, knowledge is gradually and permanently generated and adopted by producers and technicians with increasing and dynamic results in each cycle.
- 34 biofactories in which producers and their organizations are able to produce their own bio-inputs, suited to their specific crops, regions and conditions.

What public policy do we propose in the immediate future in the face of the food crisis?

- Promotion of organized processes of production of inputs by farmers.
- National science and technology plan, that is cross-cutting, interdisciplinary, for the recovery of agricultural soils: Special subsidy/not charged to production costs.
- National scientific and technological research plan to strengthen the agroecological transition in the different production systems, to increase the productivity and resilience of ecosystems and crops.
- National technical assistance plan to strengthen community processes and the organization of producers.