FROM ISOLATED ACTIONS TO TRANSFORMATIVE PROCESSES: Keys to strengthening climate action in Andean family farming

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I. CORE MESSAGES

Climate resilience is built through processes and not with isolated actions. Andean family farming faces climate risks that simultaneously affect water, productivity, productive assets, agrobiodiversity and the livelihoods of producer families. These vulnerabilities are aggravated by limitations in access to information, technologies, technical assistance, financing and adequate services.

The experience of the first phase of the Andes Resilient to Climate Change Project (2020–2024) shows a central lesson:

> **Adaptation measures generate greater possibilities of producing sustainable changes when they are part of processes articulated in time and territory, which combine policies, capacities, knowledge, productive practices, financing and governance, connecting local, regional and national scales.**

In Bolivia, Ecuador and Peru, with the aim of contributing to the climate resilience of Andean small family farming, the project, in partnership with public actors at different levels, civil society, academia and private actors, supported processes of formulation and implementation of **public policies and tools**, strengthening **of governance** and **capacities**, generation of **knowledge and technological innovation**, development of **pilot experiences** and mechanisms for **scaling up good practices**, which were configured through actions linked to the context, opportunities and institutional priorities of each country.

> **The learning also showed that the challenge is not only to expand the number of adaptation measures, but to create conditions for them to be adopted, sustained, institutionalized and scaled; which requires:**
>
> - **Articulate** policies, programs, services, and financing aimed at this sector.
> - **Connect** national, subnational and territorial levels.
> - **Involve** producer families and their organizations in decisions, recognizing them as actors and not just beneficiaries.
> - **Test and validate** solutions in the territories.
> - **Institutionalize and scale** that which demonstrates results.

II. THE CHALLENGE, URGENT CLIMATE ACTION





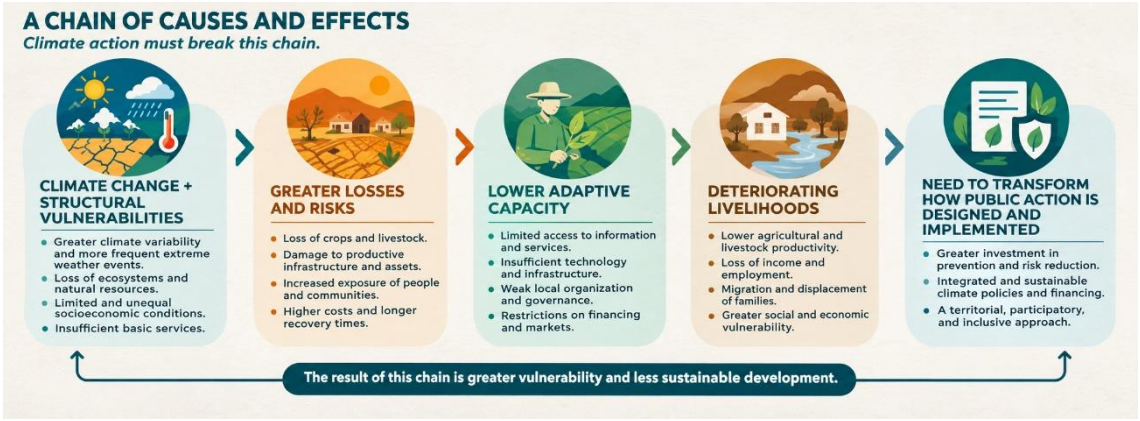
Problem. Family farming is exposed to **multiple climatic and environmental risks,** the impacts of which are interrelated**.**

- **WATER**. Lower availability and greater variability of water resources.
- **PRODUCTION.** Reduction in productivity and losses due to droughts, frosts, hailstorms, floods and other extreme events.
- **AGROBIODIVERSITY.** Loss of varieties, knowledge and genetic resources fundamental for adaptation to climate change.
- **ECOSYSTEMS.** Deterioration of services
- ecosystems that sustain production, such as water regulation and erosion control.
- **LIVELIHOODS.** Effects on income, food security and poverty conditions.

Barriers. Family farming faces limitations in the access and use of: agroclimatic information, appropriate technologies, technical assistance and extension services, financing, markets, and which are most acutely expressed in women farmers.

There are also insufficient institutional capacities and adequate policy instruments to boost the climate resilience of family farming

Climate change aggravates structural vulnerabilities, multiplies losses and weakens the adaptive capacity of family farming producers, deteriorating their livelihoods, affecting their income, food security and the sustainability of their activities. **Breaking this chain requires transforming the way in which public action is designed and implemented**: moving from isolated interventions to articulated, territorial and sustained processes, sensitive to gender and with an emphasis on social equity, which generate climate resilience of family farming and contribute to sustainable development.



III. FROM ACTIONS TO TRANSFORMATIVE PROCESSES

Between 2021 and 2024, the actions carried out by the project with its government counterparts and partners, in areas related to family farming, were progressively outlining lines of action and processes with the capacity to positively influence the productive improvement, adaptation, and climate resilience of Andean family farming. **"Transformative Processes"** for their potential **to transform capacities, productive practices, and territorial conditions to reduce climate vulnerability and promote sustainability**. These actions and processes had their own **particularities** in each country, due to the **environmental, social and economic** contexts, and the **political and institutional circumstances** under which they were developed. However, it is possible to notice **shared problems** and **verifiable and/or comparable responses** in the common eagerness to face the impact of the climate crisis on this sector.

Processes and lines of action for the productive improvement and climate resilience of Andean Family Farming in Bolivia, Ecuador and Peru, supported by Andes Resilientes

	BOLIVIA	ECUADOR	PERU
PROCESS 1	**Understanding Climate Vulnerability and Risk in Family Farming (AFA)**	**Understanding Climate Vulnerability and Risk in Peasant Family Farming**	**Strengthening national policies**
	1.1 ***Characterization of the vulnerability and climate risk of municipalities and communities of family farming and its implications for public policy.***	1.2 ***Characterization of the climate risk of peasant family farming producers and its implications for public policy.***	1.1 ***Update of the National Policy for Food and Nutritional Security of Peru*** *(PNSAN).*
PROCESS 2	**Strengthening production and mainstreaming climate action in family farming programmes**	**Knowledge, tools and governance for climate resilience of peasant family farming (TFA)**	**Sectoral and territorial planning and governance for the implementation of the NDCs of the agricultural sector**
	2.1 ***Formulation and implementation of AFA productive programs incorporating climate action*** 2.2 ***Tools and regulations to strengthen the AFA*** *(Single Registry of Sustainable Family Farming, and Framework Regulations for the Resilient Development of the Agricultural Sector).*	2.1 ***Reassessment of good ancestral practices and territorial governance within the framework of the National Agricultural Strategy for Rural Women.*** 2.2 ***Educational tools and capacity building in AFC producers, to implement good climate adaptation practices.*** 2.3 ***Restructuring and automation of the Peasant Family Agriculture Registry.***	2.1 ***Intrasectoral articulation for climate action in the agricultural sector*** *(Commission of the Agricultural Sector and Irrigation on Climate Change).* 2.2 ***Regional Action Plans for the implementation of the NDCs of the agricultural sector in Cusco and Puno.*** 2.3 ***Local Platforms for Agroclimatic Management.***
PROCESS 3	**Reducing climate risk in agriculture and food systems**	**Water Management in Water Protection Areas (HPAs)**	**Territorial management of water sowing and harvesting and family farming**
	3.1 ***Strategies and programs to reduce climate risk in soil and water management, and in agricultural and food systems.*** 3.2 ***Agricultural early warning and tool for verifying effects on the agricultural sector.***	3.1 ***Methodology for formulating technical management plans for Water Protection Areas, and its application in two HPAs.*** 3.2 ***Water School and Water Table, for training and local governance for water management in the PHCs.***	3.1 ***Technical guidelines and capacities for public investment in water planting and harvesting.*** 3.2 ***Technical tools and capacities to manage climate resilience in water management, agricultural production and rural enterprises.***
PROCESS 4	**Agroecological certification and access to markets, as drivers of climate resilience in the production of native potatoes, fruit trees and vegetables**	**Climate finance and microfinance for resilient family farming**	**In-situ conservation and sustainable use of agrobiodiversity for food security and climate adaptation**
	4.1 ***Good agroecological practices for productive improvement and climate resilience in the production of native potatoes and diversified crops.*** 4.2 ***SPG certification and differentiated business strategies for agroecological production of native potatoes and diversified crops.***	4.1 ***Identification of climate finance needs of the AFC under the National Climate Finance Strategy.*** 4.2 ***Technical assistance to savings and credit cooperatives, for the design and marketing of microfinance products for resilient and sustainable agriculture.*** 4.3 ***Authorization of credits by the San José Savings and Credit Union***	4.1 ***Tools for the recognition, planning and management of agrobiodiversity areas.*** 4.2 ***Capacity building for the in-situ conservation of agrobiodiversity and dialogue on retribution alternatives.***
PROCESS 5	**Microfinance for resilient camelid production**	**Strengthening rural extension with civil society organizations**	**Rural extension service for climate resilience based on rural talents.**
	5.1 ***Design of a microfinance product to support the production of the camelid sector****, and its adaptation to climate change.*	5.1 ***Capacity building in non-governmental entities and producer organizations for the development of horizontal rural extension services.***	5.1 ***Standards of labor competencies, capacity building and certification of competencies of alpaca fiber classifiers and categorizers.***

These processes and lines of action involved:

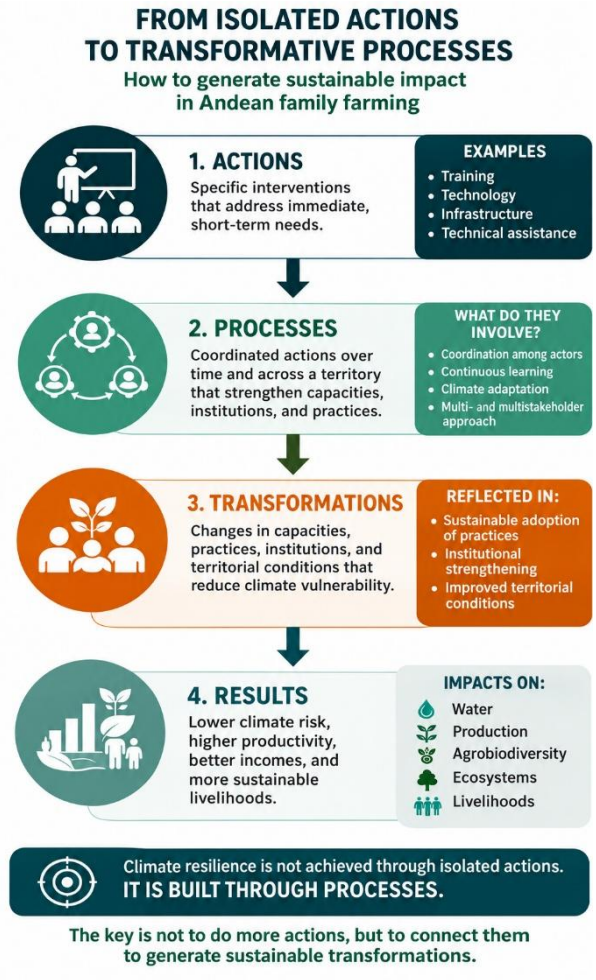
- Formulation and/or strengthening of **public policies, strategies, plans or programs**.
- Strengthening multi-stakeholder **governance spaces**.
- Development of **technical and management tools**.
- Capacity building and design of **educational** materials.
- Formulation of **studies and/or systematizations**.
- Development of **pilot experiences** to promote scaling up of adaptation measures.

Working with a logic of processes requires an articulating and converging effort of progressive actions to generate comprehensiveness and impact.

From the perspective and experience of the project, a process can be understood as:

A dynamic, participatory, articulated and multilevel sequence of technical, organizational and institutional actions aimed at transforming capacities, productive practices and territorial conditions to improve productivity, reduce climate vulnerability and promote sustainability.

Therefore, the unit of transformation should not be only the activity or action, but the process that connects the different interventions necessary to produce transformation. This implies: **temporality** (short, medium and long term), **particular territoriality**, **interaction between actors**, **learning** and **progressive and cumulative results**. Processes that must be **organically integrated and instituted** in the climate action of each country, and whose *continuity, progression and projection* are key to **materializing their final impact** on producers and populations.



IV. DIFFERENT CONTEXTS, A COMMON LESSON

- The experiences in Bolivia, Ecuador and Peru show different routes of action, but also a common pattern: **transformations are strengthened when technical, organizational and institutional actions are connected.**
- Public policy **and** capacity-building **actions** had an important presence in the three countries. **Governance spaces were also strengthened,** territorial innovations **were tested, and** routes for scaling **were developed**. National and subnational public actors, producer organizations, communities, civil society, academia, and the private sector participated.
- A relevant pattern was the combination of **national public leadership in policies and instruments and territorial leadership in pilot experiences**, generating bridges between both levels.
- **An important observation.** There is no single "recipe" for adaptation. **What can be replicated is not necessarily the intervention itself, but the logic that allowed an intervention to produce results and find conditions for its continuity and scaling.**

THREE COUNTRIES, DIFFERENT PATHS, A SHARED LESSON

Transformations are strengthened when actions are connected.







	BOLIVIA	ECUADOR	PERU
KEY EXPERIENCE	Resilient agroecological production of native potatoes.	Management of Water Protection Areas.	Water sowing and harvesting + conservation of agrobiodiversity.
HOW WAS IT CONNECTED?	Productive innovations + Participatory Guarantee Systems (PGS) + markets + public programs.	Technical knowledge + local planning + water schools + governance.	Information + public/private actors + local knowledge + territorial practices.
MAIN LEARNING	Innovation can scale up when it is incorporated into existing institutions and programs.	Water resilience requires capacities and territorial agreements.	Knowledge creates value when it is turned into decisions and actions in the territory.
IN COMMON	Participation of public and subnational actors, producer organizations, communities, civil society, academia, and the private sector.		

A SHARED LESSON

There is no single "recipe" for adaptation.
What can be replicated is the logic that enabled an intervention to produce results and create conditions for its continuity and scaling.

V. SIX CONDITIONS FOR TRANSFORMATIVE CLIMATE ACTION

The project's learnings have made it possible to identify six conditions that can guide policies and interventions for the climate resilience of Andean family farming.

1. **PUBLIC POLICIES AND SERVICES WITH A RESILIENCE APPROACH**
   Adaptation must be incorporated into the programs and services that reach family farming, this implies:
   - Integrate climate risk criteria into production programs;
   - Strengthen rural extension and technical assistance;
   - Adapt planning and investment tools;
   - Articulate agricultural, environmental, social and climate policies.

   > **Evidence: 14 policies, plans, programs and public tools related to family farming and its climate resilience, strengthened in Bolivia, Ecuador and Peru[1].**

2. **MULTI-LEVEL AND MULTI-STAKEHOLDER GOVERNANCE**
   National decisions need to be connected with territorial realities, this implies:
   - Stable mechanisms for dialogue;
   - Coordination between levels of government;
   - Intersectoral articulation;
   - Effective participation of organizations and producer families.

   > **Evidence: 300 institutions involved in governance spaces and 552 representatives participating in multilevel and multi-stakeholder articulated management spaces.**

3. **KNOWLEDGE AND SKILLS TO DECIDE AND ACT**
   Information on climate risks is only useful if it can be understood and used by decision-makers, this involves:
   - Strengthen capacities in producers and organizations, extension workers and technicians, public managers;
   - Develop capacities to interpret agroclimatic information:
   - Articulate scientific knowledge and local knowledge of men and women in the countryside.

   > **Evidence: 36 institutions at the national and subnational levels in Bolivia, Ecuador and Peru, with increased capacities to strengthen their services and scale up climate action; 1,208 officials, technicians, extension workers and producers participating in structured training[2].**

4. **TERRITORIAL INNOVATION AND SCALING**
   Solutions need to be tested, learned, and adapted before scaling up, this involves: **Identifying → testing → validating → documenting, → funding → institutionalizing → scaling.**

   > **Evidence: 30 good practices for climate resilience in family farming**, promoted for replication and scaling up in Bolivia, Ecuador, and Peru; **346 producer families validating and adopting innovations[3]; 12 strengthened mechanisms and public services to favor scaling**.

5. **FINANCING FOR RESILIENCE**
   Adaptation needs accessible financing that is appropriate to the characteristics of family farming, this implies:
   - Incorporate resilience criteria into investments, aligning them with adaptation needs;
   - Adapt financial products to production cycles and producers' capacities;

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[1] The project promoted the strengthening of gender equality and social equity criteria in these public policy tools, with specific actions, as is the case in Ecuador where the project accompanied the territorial implementation of the National Agricultural Strategy for Rural Women (ENAMR), including the installation of provincial technical tables and the enhancement of ancestral knowledge of indigenous women.

[2] In Peru, women alpaca fiber sorters strengthened and certified their skills, improving their employability and income; and in Ecuador, community leaders and leaders of the Organization of Indigenous and Peasant Women Sowing Hope (OMICSE) strengthened capacities for water management and decision-making on agricultural practices.

[3] In Bolivia, peasant women's associations adopted agroecological innovations in native potato production, making their productive and leadership role visible, and achieving economic empowerment and participation in decisions about their livelihoods.

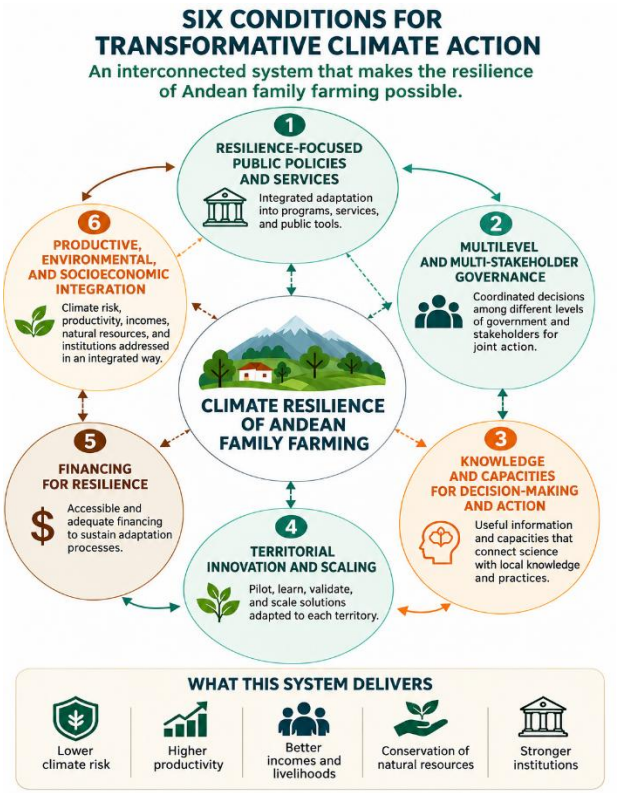
- Promote public-private financial partnerships;
- Improve financial education and inclusion with an emphasis on women with barriers to access assets and credit.

> **Evidence: The equivalent of CHF 56,131,325.30 Swiss francs of public and private investment for the implementation of climate change adaptation initiatives.** In Bolivia and Peru, in public investment associated with productive and capacity-building programs. In Ecuador, in private investment associated with loans for sustainable agriculture granted to family farming producers by the San José Savings and Credit Cooperative.

6. PRODUCTIVE, ENVIRONMENTAL AND SOCIO-ECONOMIC INTEGRATION

Resilience is not only a productive and environmental issue. Policies must simultaneously seek to: **reduce climate risk + improve productivity + sustain income + conserve natural resources + strengthen capacities and institutions + strengthen livelihoods and well-being conditions.**

> **Learnings:** Processes must integrate and connect according to the territory, **water, soils, ecosystem services, productivity, agroecology, agrobiodiversity, productive diversification, markets, income, care, well-being and governance**. Impacts at scale require **integrality, convergence and articulation in time and territory.**



Six conditions that enhance each other, together turn actions into processes and processes into transformations

A transversal condition: flexibility

The experience of the project shows that participatory planning and the ability to adapt to changes in political-institutional priorities contributed to the results achieved. **Processes should be sufficiently structured to guide results, but flexible enough to respond to changes in context.**

VI. FIVE PRIORITY ISSUES FOR DECISION-MAKERS

- **DECISION 1. Integrate climate resilience into mechanisms and instruments that already serve family farming.**
  Incorporating adaptation and risk management criteria into existing programs, services, and financing, with priority given to agriculture, water, rural development, food security, economic inclusion, and conservation of natural resources, seeking alignment and articulation of policies, actors, and resources.

- **DECISION 2. Institutionalize territorial governance.**
  Generate stable inter-stakeholder coordination mechanisms, with responsibilities, agenda, follow-up and connection with the national and subnational levels. Ensure effective representation of rural women's organizations.

- **DECISION 3. Finance processes, not just activities.**
  Investment and financing instruments should recognize that adaptation requires a combination of capacities, organization, assistance, infrastructure, practices, and monitoring. Review barriers faced by women producers in accessing credit, assets, and markets. **Financing must accompany the transformation process.**

- **DECISION 4. Enable institutional mechanisms to scale innovations.**
  Public programmes should have mechanisms to: **identify** → **validate** → **document** → **adapt** → **finance** → **replicate.** Thus, a pilot experience ceases to be an isolated project or action and can become a public policy solution, institutionalising and converting lessons learned and validated solutions into permanent instruments.

- **DECISION 5. Measure change, not just execution.**
  Monitoring should complement activity and output indicators with indicators of capacities, adoption of practices, reduction of losses and risks, productivity and income, sustainability of livelihoods, institutional strengthening and territorial governance, gender (modification of conditions of access, voice, control of resources and benefits in women).

VII. FINAL CONCLUSION

Adaptation needs continuity, articulation, and scale. The Andes Resilientes experience shows that **climate action can generate greater value when it is articulated with existing policies and processes, responds to the needs of territories, and connects the capacities of different actors.**

The results achieved show that there are concrete bases on which to move forward, the next challenge is to transform these learnings into a more systematic way of making climate policy for family farming, to move forward:

- **From isolated actions to processes.**
- **From processes to transformations.**
- **From territorial experiences to policies capable of sustaining and scaling the climate resilience of Andean family farming.**

Check the complete document on our website: www.andesresilientes.org