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Disaster relief emergency fund (DREF) Ecuador: Drought

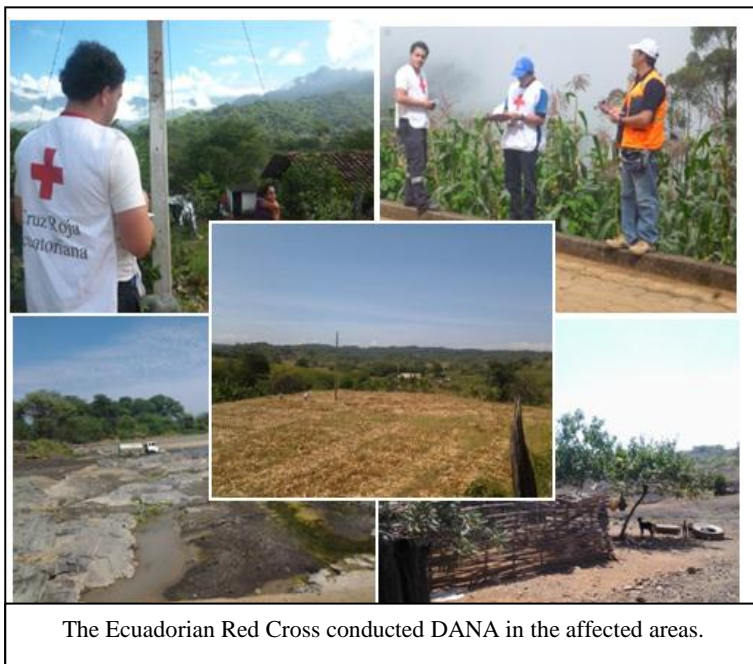
 International Federation
of Red Cross and Red Crescent Societies

DREF operation nº MDREC007 11 June 2013

The International Federation of Red Cross and Red Crescent (IFRC) Disaster Relief Emergency Fund (DREF) is a source of un-earmarked money created by the Federation in 1985 to ensure that immediate financial support is available for Red Cross and Red Crescent emergency response. The DREF is a vital part of the International Federation's disaster response system and increases the ability of National Societies to respond to disasters.

264,319 Swiss francs have been allocated from the IFRC's Disaster Relief Emergency Fund (DREF) to support the Ecuadorian Red Cross (ERC) in delivering immediate assistance initially for an approximate 1,025 families.

Summary: Ecuador's southern region has gone for four months without rain. The province of Loja is the most affected province due to this drought. Given this situation, on 8 May 2013, during a meeting with the provincial Emergency Operations Centre (EOC), a contingency plan was presented for an immediate response to provide water for human consumption and use in the agricultural and livestock activities in the affected cantons of Zapotillo, Celica, Chaguarpamba, Olmedo, Paltas, Calvas, Sozoranga, Espíndola, Catamayo, Macará and Puyango.



The Ecuadorian Red Cross conducted DANA in the affected areas.

Considering that the provincial economy is completely based on agricultural and livestock, the rainfall that is 72 per cent below normal has caused losses in the corn, peanut, and bean crops and there is a high scarcity of food and foliage for cattle. According to the forecast report from the National Institute of Meteorology and Hydrology (INAMHI), rain is not expected in upcoming days; clouds with misty rain in the evening and fog are expected.

As part of its response plan, the Ecuadorian Red Cross (ERC) has conducted, in coordination with the National Secretariat of Risk Management and the Ministry of Agriculture, Livestock, Aquaculture and Fishing (MAGAP), a Damage Assessment and Needs Analysis (DANA) in the most vulnerable communities located in the cantons of Zapotillo, Paltas, Céllica and Macará. A total of 1,025 directly affected households have been identified.

NOMBRE DEL CANTON	SUPERFICIE TOTAL DEL TERRITORIO (HA)	ESTIMACION SUPERFICIE DE USO AGRICOLA	ESTIMACIÓN DE SUPERFICIE SEMBRADA POR CULTIVO EN HECTAREAS								ESTIMACION SUPERFICIE DE USO AGRICOLA	TOTAL ESTIMACION CULTIVADO	PORCENTAJE		
			ARROZ	MAIZ	BANANO ASOCIADO	CACAO	CAFÉ	FREJOL	CEBOLLA	MANI			CULTIVADO	AFECTADAS	PERDIDAS
CELICA	45000	15000	0	9000	0	0	500	400	0	0	33,33%	9.900	66,00%	52,12%	0,21%
MACARA	57800	27744	1000	3	50	0	100	20	0	0	48,00%	1.173	4,23%	27,92%	52,45%
PALTAS	112400	53952	0	2000	0	0	100	0	0	400	48,00%	2.100	3,89%	48,26%	22,23%
PINDAL	19400	10000	0	9000	50	1	200	0	0	0	51,55%	9.251	92,51%	4,66%	27,49%
PYANGO	64300	22505	0	7000	1000	0	1000	0	0	0	35,00%	9.000	39,99%	94,48%	0,00%
ZAPOTILLO	123800	37140	500	7000	0	6	0	0	1000	0	30,00%	8.506	22,90%	23,06%	32,10%
	422700	166341	1500	34003	1100	7	1900	420	1000	400	39,35%	39.930	24,25%	35,63%	27,60%

Based on the Ecuadorian Red Cross staff's assessment report, the following information indicates the cantons where this DREF intervention will be implemented:

- a) **Zapotillo:** Soil erosion is a serious threat for the canton, which has extensive high-risk areas, mainly in the parishes of Limones and Zapotillo. Prolonged drought has historically affected the canton; in the past it has been the main cause for migration, such as during the droughts of 1960, 1996, 2004, 2005 and 2011. The full and partial absence of rain has caused considerable human and animal losses, which in some communities and/or households reaches almost 80 per cent. Furthermore, the resulting presence of illnesses such as dermatitis and parasitosis is a factor that needs to be taken into account.

CANTON	PARISH	SECTOR	# FAMILIES AFFECTED
Zapotillo	Zapotillo	Rural neighbourhoods	60
	Garza Real	Garza Real	50
	Limones	Limones	30
	Paletillas	Paletillas	30
	Bolaspamba	Bolaspamba	10
	Cazaderos	Cazaderos	5
	Mangahurco	Mangahurco	35

- b) **Celica:** Sabanilla has a considerable amount of damage to plant life and almost 100 per cent of productivity in the lower altitude areas of the parish has been lost. While plants exist, the total harvest has been lost, together with the investment some inhabitants have made by means of loans from national banks. The majority of water for human consumption has not been affected.

CANTON	PARRISH	SECTOR	# FAMILIES AFFECTED
Celica	Sabanilla	Higuerón	37
		Guabo bajo	16
		Pindo	8
		Cabuyo	6
		Chaquiuro	3
		Naranjo	12
		Vicin	32
		Azota	7
		Potrerrillo	23
		Las Pampas	13
		Guayabito	8
		Mango Pinza	5
		Guacimal	7

- d) **Paltas:** This canton has seen a decrease in productivity, with the loss of plants and food for animals used for the affected families' sustenance. Harvest loss reaches 60 per cent in the lower altitude sectors of each of the three parishes.

CANTON	PARISH	SECTOR	# FAMILIES AFFECTED
Paltas	Cangonamá	Piedra Blanca	100
		Jumarín	
		Tunaspamba	
	Yamana	La Cordillera, La Rinconada, La Merced, Barrial Blanco, Pan de Azúcar, Alusaca, Barrio Polo-Polo, el Fundo, Martín Pamba, Playas, Palo Blanco.	130
	Valle de Cazanga	Sabanilla	36
		Zapotepamba	15
		Naranjo	49
		Macandamine	78

- e) **Macará:** In La Victoria parish, it is estimated that at least a 50 per cent of the crops in the lower-altitude areas of Jorupe, Casa Vieja and Angazhcola have been affected, impacting approximately 50 families (25 per cent of the population).

In the Sabiango parish, 40 per cent of the crops in the lower-altitude areas of Papayal, San Juan Pamba, Achima, Curichanga Algodonal, Curichanga Corral, El Pindo and el Huasimo have been affected. This has impacted 140 families (65 per cent of the population). The population in this area state that *ajinos* (an insect) are also damaging their crops.

In the Tacamoros parish, it is estimated that 25 per cent of the crops have been affected in the lower altitude areas of Portillo, el Limón, Las Delicias, and Pedregal, among others. This has impacted 20 families (20 per cent of the population).

CANTON	PARISH	SECTOR	# FAMILIES AFFECTED
Macara	La Victoria	Socana	30
		Labasconda	
		Fortundo	
		Vascona	
		La Guaca	
	Sabiango	Papayal	170
		Achima	
		San Juan Pamba	
		El Pindo	
		El Huasimo	
		Tacamoros	
		Nueva Fátima	
		Sozoranga	
		Tacamoros	
	Sozoranga	Sozoranga	

CANTON	PARRISH	SECTOR	# FAMILIES AFFECTED
Sozoranga	Tacamoros	Tacamoros	20
	Sozoranga	Sozoranga	30

While a large portion of crops, such as corn, have germinated, the majority cannot be sold since they have not fully developed. In the productive sector, the loss of income due to the low yield in agriculture and livestock production is a warning sign for the population. This low yield leads to unemployment, increase in credit risk and capital loss. The main effects on the livestock sector are the loss of milk production, the decrease in the weight of cattle, the forced reduction of livestock due to immediate sales at low prices, and the elevated cost or unavailability of food for the livestock.

Coordination and partnerships

In this emergency, the Ecuadorian Red Cross works in coordination with local and national authorities to produce situation reports and plan activities to respond immediately to the emergency.

The provincial decentralized autonomous government and the National Secretariat for Risk Management (SNGR) coordinate the inter-institutional action and have subdivided the areas for attention, in order to avoid duplicating efforts. In line with this coordination, the ERC will support MAGAP in the intervention with the agricultural producers. Based on the contingency plan, they will be provided with seeds and fertilizers in the designated cantons. The Ecuadorian Red Cross will support trainings for the communities in the making of organic fertilizer for the next harvest season.

Furthermore, based on a prior agreement with the National Institute of Meteorology and Hydrology, every three days INAMHI has been issuing weather reports on the affected region, guaranteeing updated and confirmed information to plan the intervention actions.

The inter-institutional work is part of this operation plan and the actions that will be taken include, among others, the provision of extensive irrigation hosing. The rehabilitation of the irrigation canals is also planned, and will include the participation of the provincial government of Loja. Additionally, an agricultural insurance will be created for the affected agricultural producers through insurance companies that operate with the National Development Bank and the savings and loan cooperatives located in the region. Actions will be undertaken to request the extension of payment plans for loans taken from private and public banks, as well as from the savings and loan cooperatives.

However, the contingency plan does not cover all the cantons. For this reason and following the relevant coordination, the Ecuadorian Red Cross designed a plan of intervention by sectors for five cantons that are high priority for attention.

Red Cross and Red Crescent action

The Ecuadorian Red Cross has a permanent local headquarters in Loja province since 1957. It currently has 12 canton-level branches: Loja, Catamayo, Calvas, Paltas, Pindal, Puyango, Macará, Saraguro, Espíndola, Celica, Chaguarpamba and Gonzanamá. In the Loja province, the ERC has approximately 400 volunteers and 50 administrative and technical staff (doctors, clinical laboratory technicians, agricultural engineers, accountants, economists, risk management professionals) in the areas of risk management, health, youth, principles and values, blood bank planning and services, clinical laboratory and orthopaedic bank.

As an immediate response and with the advice from the national technical officer for risk management, the ERC local headquarters has implemented activities in inter-institutional teams and in an independent manner in locations that have not been addressed. The following are the main areas of action:

- ✓ **Damage Assessment and Needs Analysis:** On 15 May, four teams were formed, which were composed of ERC volunteers and SNGR personnel. These teams travelled to the most affected areas of the cantons, as designated by the EOC.
- ✓ **Participation in canton Emergency Operations Centre (EOC) meetings and coordination meetings with the SNGR and MAGAP.**

These actions have allowed the Ecuadorian Red Cross to produce its general assessment report, shown in Annex 1.

The needs

Based on the initial damage assessment, the following are the primary needs to be addressed immediately:

- **Distribution of food kits** during the first two months, while the mitigations actions (water access for crops) are meant to decrease the percentage of crop loss.
- **Distribution of safe and clean water storage tanks** to guarantee access to 300 families which do not have access to the central water distribution system and therefore use nearby streams for their supply. These will allow them to maintain water reserves for longer periods of time.
- **Distribution of domestic water filters** made out of a clay, that are easily used and stored. Taking into account that only one community drinks chlorinated water (Sabanilla), it was decided to distribute these types of filters to avoid changing local customs.
- **Support in the reestablishment of the local irrigation system** to guarantee that the central irrigation systems have enough water flow that is distributed by gravity to the communities' areas for crops. The budget plans to purchase 22,400 metres of hose that allows for water provision by gravity from the irrigation water system dikes, because the mountain geography in this area allows it.
- **Training families on food preparation for animals and organic fertilizer**, in coordination with MAGAP. Trainings will be held to make this food in the communities, avoiding residue waste. Support will be given for the purchase of molasses which will be mixed with the rotten crops as an energetic supplement for feeding the livestock, due to its high sugar content and low cost. In the case of fertilizer, organic waste will be used to prepare the soil before sowing.
- **Training in health, hygiene promotion, water management and treatment**, in order to transfer skills on healthy practices and water treatment for human consumption, as well as on disease prevention, within the community health-based methodology (SPAC).

As a result of meeting these needs, the following results are expected:

- Families know and implement production techniques converting agricultural waste and compost into organic fertilizer or animal feed.
- Families maintain the sources of income from livestock (meat or milk) and are able to better feed themselves.
- The families have managed to maintain access to the water received by gravity through the intake hoses that have enabled a decrease in its waste.
- The families have managed to yield a small cost savings without reducing their food consumption as a result of the food package delivery. With these savings they can resume loan payments to the banks.
- The beneficiary families are guaranteed seeds for the new planting season thanks to the inter-institutional agreement between the Ministry of Agriculture and ERC.
- Families have clear measures of preparation and activation of the immediate response to possible drought in coming years, thus reducing the impact of the lack of water, through the development of community contingency plans.
- Eighty per cent of families have been trained, and implement treatment techniques for safe water in their homes.

TARGET POPULATION

DIRECT BENEFICIARIES: 1,025 families in 15 parishes in 5 cantons. The identification of the beneficiary communities has been obtained with the information gathered by the damage assessment teams, which went to the affected areas, as well as from the coordination meetings and subdivision of sectors for immediate attention.

CANTON	PARISH	FOOD KITS	WATER TANKS	DOMESTIC FILTERS	COMMUNITY CHLORINATION	IRRIGATION REACTIVATION MICROPROJECT	METRES OF HOSE
Celica	Sabanilla	177	20	157	1	1	8000
Paltas	Cangonamá	100	20	80	-	1	2000
	Yamana	130	15	115	-	-	0
	Valle de Cazanga	178	0	178	-	1	3000
Zapotillo	Barrios Marginales Zapotillo	60	60	0	-	1	200

	Garza Real	50	50	0	-	1	200
	Limones	30	30	0	-	1	200
	Paletillas	30	30	0	-	1	200
	Bolaspamba	10	10	0	-	1	200
	Cazaderos	5	5	0	-	1	200
	Mangahurco	35	35	0	-	1	200
Macará	La Victoria	30	0	30	-	1	6000
	Sabiango	140	0	140	-	1	1000
Sozoranga	Tacamoros	20	20	40	-	-	0
	Sozoranga	30	5	25	-	1	1000
TOTAL		1,025	300	765	1	13	22,400

All the beneficiaries are people of limited resources, mostly small-scale farmers, daily wage labourers and livestock producers. They find themselves at the lowest poverty levels in the country and in a zone that has high levels of malnutrition.

The following selection criteria have been considered for the beneficiary communities:

- Beneficiaries live in the area identified as affected by the drought.
- Households have been affected in their agricultural/livestock activities (the small agricultural producers or agricultural workers according to the MAGAP report from May 2013).
- Beneficiaries are located in the sectors assigned to the Ecuadorian Red Cross by the Emergency Operations Committee of the Decentralized National System for Risk Management.
- Beneficiary communities have signed the commitment agreement.

The ERC is committed to give priority to pregnant women, households with a person with a disability and/or heterogeneous and single-parent households.

INDIRECT BENEFICIARIES:

The families in the area that have access to the products sold by the direct beneficiaries, following a recovery of local production, could be considered indirect beneficiaries

The proposed operation

Livelihoods	
Outcome: Contribute to the recuperation of livelihoods by the most vulnerable families in 15 parishes in the five identified cantons.	
Output 1: 1025 families have received food for two months.	<ul style="list-style-type: none"> • Identification and registration of beneficiaries; • Tender and purchase of supplies for the distribution of food kits; • Creation of the distribution plan with personnel from the canton committees; • Distribution of food kits to 1025 families.
Output 2: 1025 families have strengthened their capacity to recover their agricultural livestock livelihoods in the affected areas.	<ul style="list-style-type: none"> • Hiring of the local technical team: a local project coordinator and an agronomist; • Creation of an agricultural/livestock attention plan; • Creation of a distribution plan with the personnel from the canton committees; • Implement 13 microprojects to reactivate irrigation systems in five cantons; • Facilitate four training sessions in the communities to produce food for animal consumption, using the leftovers from local production; • Establish mutual cooperation agreements with MAGAP and the University of Loja for technical assistance to families; • Facilitate five (one per canton) training sessions in planting, care and sowing techniques.

IMPLEMENTATION METHODOLOGY:

To start the implementation activities, coordination work has been undertaken with the SNGR, the water committees, the decentralized autonomous governments (at the canton level) and MAGAP. These inter-institutional meetings have been used to define the provincial agricultural livestock support plan (in all the cantons). These are mainly focused on community organization for the implementation of micro-projects to reactivate the community irrigation systems based on the governmental emergency contingency plan, which will be complemented with this intervention.

MAGAP will lead the analysis of the agricultural livestock technical area because it has the training methodology and materials for the creation of food for the animals and of organic fertilizer, which can benefit the activities immediately.

Considering that the decentralized autonomous governments are representatives of the communities, they will monitor the community irrigation systems implemented within this project through their parish delegates, following the intervention.

During the planning and implementation phases of activities, the work will be conducted using a participatory methodology involving the communities via meetings at different levels (leaders, health brigades and families in general) with the aim of guaranteeing their complete involvement in the voluntary community work, known as *mingas* (for its name in the Kichwa language), as well as the participation in trainings and in the repeat training activities in the beneficiary families.

The Ecuadorian Red Cross provincial committee of Loja (local technical team for the project and volunteers) will be responsible for coordinating actions at the local level: family census, distribution of cards to beneficiaries so they can access the kits, plans for distributions, distribution of kits, organization and participation in training sessions, and writing and presentation of monthly reports to ERC central headquarters.

The below table contains the content of the food kits:

DESCRIPCION	UNIDAD	CANTIDAD
Rice	kg	7
Oats	kg	4
Beans	kg	2
Lentils	kg	2
Oil	Lt	2
Tuna (12 cans 170grams)	kg	2
Sugar cane cake	kg	1
Sugar	kg	4
sIonized Salt	kg	1
Packing bags	kg	1

Water, sanitation and hygiene promotion	
Outcome: Guarantee access to safe and clean water to the families who do not have an installed water distribution system.	
Output: 1025 families have access to sufficient safe and clean water, with water storage tanks and domestic filters	<ul style="list-style-type: none">• Purchase of supplies for the storage of safe and clean water (water tanks and accessories);• Distribution of 270-litre water storage tanks to 300 families;• Distribution of domestic water filters to 765 families;• one workshops on SPAC methodology for ERC volunteers;• five workshops (1 per canton) in SPAC for community leaders;• 100 home visits (20 per canton) by the provincial committee health promoters.

METHODOLOGY AND IMPLEMENTATION:

As in the livelihoods objective, the actions related to water issues will be coordinated together with the SNGR, the decentralized autonomous governments (at the canton level), the Ministry of Public Health and the local water committees, who are the main stakeholders in the area. The training of community leaders in the SPAC methodology and the home visits by the provincial committee health promoters will guarantee the fulfilment and implementation of the health measures, hygiene promotion and water treatment, by working directly with the beneficiaries. To be able to evaluate the acceptance and implementation of health techniques, the ERC provincial committee volunteers and staff, as well as the community members will create an initial and a final baseline.

ACTIVITY TIMELINE

Activities / Month	JUN	JUL	AGO
Identification and registration of beneficiaries			
Tender and purchase of supplies for the distribution of food kits			
Creation of the distribution plan with personnel from the canton committees			
Distribution of food kits to 1025 families			
Hiring of the local technical team: a local project coordinator			
Creation of an agricultural/livestock attention plan			
Implement 13 micro projects to reactivate irrigation systems in five cantons			
Establish two mutual cooperation agreements with MAGAP and the University of Loja for technical assistance to families			
Facilitate four training sessions in the communities to produce food for animal consumption using leftovers from the local production			
Facilitate five (one per canton) training sessions in organic fertilizer			
Purchase of supplies for the storage of safe and clean water (water tanks and accessories)			
Distribution of 270-litre water storage tanks to 300 families in 12 parishes			
Distribution of domestic water filters to 765 families in eight parishes			
One workshops on SPAC methodology for ERC volunteers from three canton-level committees in Loja			
Five workshops (one per canton) in SPAC for community leaders			
100 home visits (20 per canton) by the provincial committee health promoters			
Presentation of an update each month and of the final report			

Logistics

The operation will be implemented by the Ecuadorian Red Cross provincial committees and canton branches with the support, supervision and monitoring by the National Society's central headquarters. The distributions will be conducted through actions with volunteers from all the operative programmes and in coordination with the community leaders and the National Secretariat for Risk Management. All of the actions are based on the joint procedures for the Delivery of Humanitarian Aid, the regulations from the Manual of Operational Safety and Safe Access.

Contact information

For further information specifically related to this operation please contact:

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1. Save lives, protect livelihoods, and strengthen recovery from disaster and crises.
 2. Enable healthy and safe living.
 3. Promote social inclusion and a culture of non-violence and peace.
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DREF OPERATION

11-Jun-13

Drought Ecuador

		DREF Grant Budget CHF
Budget Group		
500	Shelter - Relief	
501	Shelter - Transitional	
502	Construction - Housing	
503	Construction - Facilities	72,946
505	Construction - Materials	
510	Clothing & Textiles	
520	Food	76,305
523	Seeds & Plants	13,958
530	Water, Sanitation & Hygiene	34,454
540	Medical & First Aid	
550	Teaching Materials	2,861
560	Utensils & Tools	0
570	Other Supplies & Services	
578	Cash Disbursements	
	Total RELIEF ITEMS, CONSTRUCTION AND SUPPLIES	200,524
580	Land & Buildings	
581	Vehicles	
582	Computer & Telecom Equipment	
584	Office/Household Furniture & Equipment	
587	Medical Equipment	
589	Other Machinery & Equipment	
	Total LAND, VEHICLES AND EQUIPMENT	0
590	Storage, Warehousing	
592	Distribution & Monitoring	1,563
593	Transport & Vehicle Costs	893
594	Logistics Services	
	Total LOGISTICS, TRANSPORT AND STORAGE	2,457
600	International Staff	4,653
661	National Staff	
662	National Society Staff	11,530
667	Volunteers	2,885
	Total PERSONNEL	19,067
670	Consultants	
750	Professional Fees	
	Total CONSULTANTS & PROFESSIONAL FEES	0
680	Workshops & Training	14,554
	Total WORKSHOP & TRAINING	14,554
700	Travel	4,653
710	Information & Public Relations	1,861
730	Office Costs	3,071
740	Communications	1,256
760	Financial Charges	744
790	Other General Expenses	
799	Shared Office and Services Costs	
	Total GENERAL EXPENDITURES	11,585
830	Partner National Societies	

831	Other Partners (NGOs, UN, other)	
	Total TRANSFER TO PARTNERS	0
599	Programme and Services Support Recovery	16,132
	Total INDIRECT COSTS	16,132
	TOTAL BUDGET	264,319

ANNEXES

ANNEX 1. Damage assessment report

ANNEX 2. Health table

Health indicators in the affected cantons

	Zapotillo	Paltas	Celica	Macará	Province
Poverty	89.30%	86.70%	80.30%	70.00%	66.53%
Illiteracy	10.00%	5.80%	6.30%	4.70%	5.11%
Public water network	13.60%	23.40%	32.40%	56.70%	43.55%
Sewage system	19.10%	25.60%	35.60%	52.90%	48.49%
Child mortality	4.30%	6.90%	14.10%	8.40%	10.22%
Newborn mortality	0.00%	0.00%	3.50%	5.60%	5.81%

Source: <http://construyamosalud.grupofaro.org/datoscanton>

Starting in 2009 the Zero Malnutrition programme (Nutrition Action) was started in the country. This is a comprehensive response by the Ministries of Health, Economic and Social Inclusion, Education, Agriculture and Housing is aimed to the improvement of the population's health and nutrition of the population, placing an emphasis on boys and girls under the age of 5 years.

The following table shows the figures on malnutrition in the cantons in this operation:

	Quantity of children between 1 and 5 years	Prevalence of malnutrition in children between 1 and 5 years	Quantity of children between 1 and 5 years with chronic malnutrition
Zapotillo	969	47.56	461
Paltas	2393	25.27	605
Celica	1290	38.79	500
Macará	1831	29.72	544

Source: malnutrition information from the WHO