



# Ministry of Economy and Finances

## Directorate General of Public Investment



## PRACTICAL EXAMPLE



**“EXPANSION AND IMPROVEMENT OF TOURIST SERVICES IN THE  
TOURIST ROUTE CHOQUEIRAO, SANTA TERESA DISTRICT, LA  
CONVENCIÓN PROVINCE, CUSCO”**

# TOURIST ROUTE



# TOURIST INSTALLATIONS



# ANTECEDENTS OF DISASTERS IN PU

## Historical record of PU

1994	2003	2005	2010	2012	2013	2014
Restauración y puesta en valor	Construcción de puente peatonal	Acondicionamiento de servicios turísticos	Lluvias intensas producen deslizamiento de rocas, produce colapso del puente	Mejoramiento y ampliación de servicios	Deslizamientos de rocas	Reposición del puente peatonal

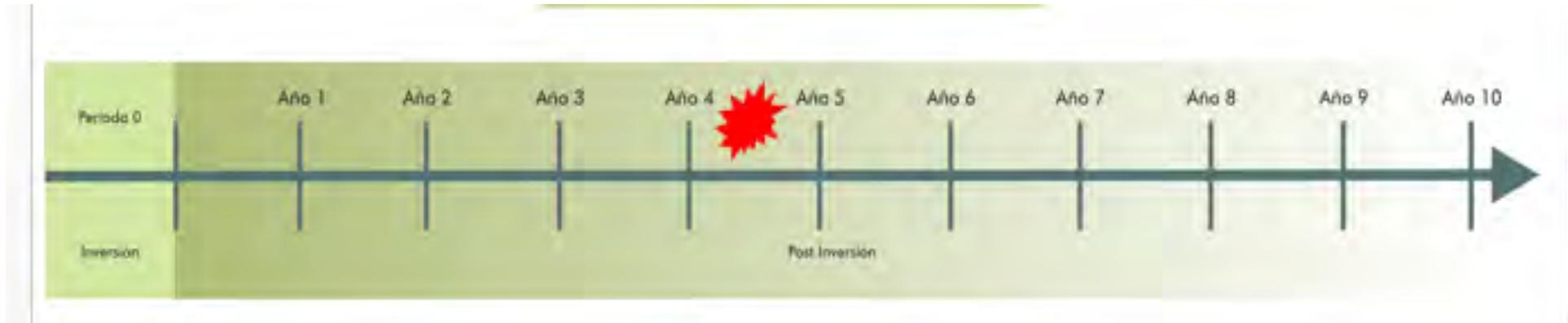


# HAZARDS IN THE TOURIST ROUTE

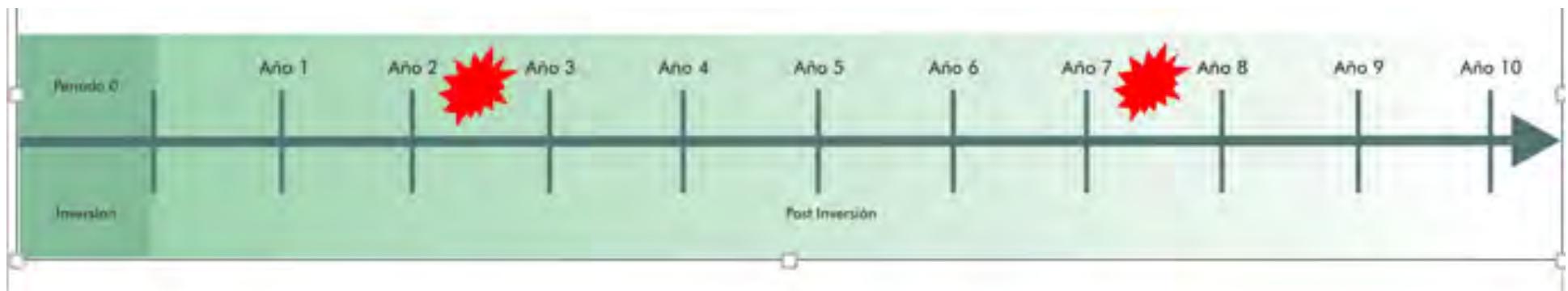


# HAZARD SCENARIOS

Scenario 1



Scenario 2 with CC



# **REDUCTION RISK MEASURES**

## **Exposition**

- Stabilization of rocky slopes
- Vegetal cover recovery
- Construct retaining walls

## **Fragility**

- Improved design of routes
- Construction bridges, footbridges

## **Resilience**

- Implement geodynamic monitoring system
- Develop tools for emergency response
- Organize tourist operators and the population
- Preparation and information to visitors
- Equipment for emergency situations

# BENEFICIOS SOCIALES DE LAS MRR

## Benefits not lost

- Higher tourist flow due to RRM
- Reduction in tourist flow caused by disasters avoided

## Capacity recovery costs avoided

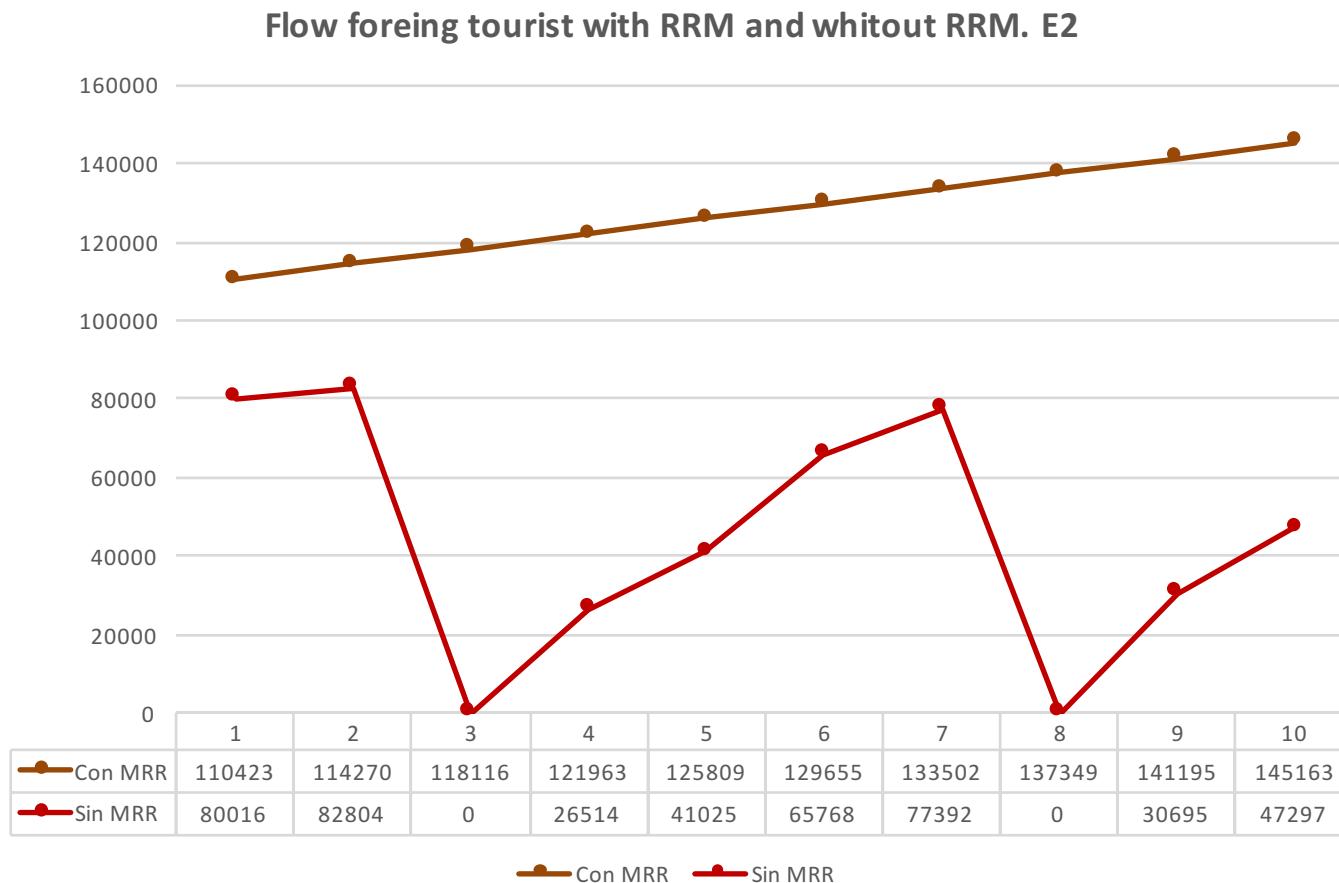
- Non-incurred recovery costs for adequate capacity of service provision capacity

## Costs of emergency attendance avoided

- Rehabilitation or road-cleaning costs avoided
- Tourist attendance, rescue and evacuation cost

# BENEFITS NOT LOST S 2

Gradual recovery since four year (30 %) to seven year (80 %)



## FLOW COST AND BENEFITS OF RRM. S 2 (THOUSANDS PEN)

ESCENARIO 2	Inversión	1	2	3	4	5	6	7	8	9	10
CE emergencia	-	-	-	-4,000	-	-	-	-	-4,000	-	-
CE recuperación	-	-	-	-838	-	-	-	-	-838	-	-
Mayores flujos	-12,331	12,775	13,219	13,662	14,106	14,550	14,995	15,438	15,882	16,372	
Beneficios NO perdidos	-	-	-36,367	26,324	21,364	12,025	8,264	42,561	30,660	24,771	
<b>TOTAL DE BENEFICIOS</b>	<b>-12,331</b>	<b>12,775</b>	<b>54,423</b>	<b>39,987</b>	<b>35,471</b>	<b>26,575</b>	<b>23,259</b>	<b>62,837</b>	<b>46,542</b>	<b>41,144</b>	
Inversión en MRR	10,857	-	-	-	-	-	-	-	-	-	-
Mantenimiento de MRR	-543	543	543	543	543	543	543	543	543	543	543
<b>TOTAL COSTOS</b>	<b>10,857</b>	<b>543</b>									
<b>FLUJO NETO</b>	<b>-10,857</b>	<b>11,788</b>	<b>12,232</b>	<b>53,881</b>	<b>39,444</b>	<b>34,928</b>	<b>26,032</b>	<b>22,716</b>	<b>62,294</b>	<b>45,999</b>	<b>40,601</b>
<b>VANS</b>	<b>200,043</b>										
<b>TIRS</b>	<b>158 %</b>										