

Appendix 4: Two-tiered explanatory category system grounded in related codes and memos

No. †	Code or Memo	f ‡	Level 1 categories§	Level 2 categories
M1	The root problems are political, and the economic model	5	International political and economic context	National and international political and economic context
1	The globalized economic system causes environmental and socioeconomic deterioration	11		
2	International pressures /obligations	9		
3	Economic value of Natural Capital must be shown, to give political weight to the environment sector	16		
4	Opposition and pressure from political, economic, social or criminal vested interests	64	National political and economic context	
M2	Power structures in Mexico are resistant to change	4		
5	Budgetary constraints	37		
6	Generous programs of subsidies to encourage agricultural production, provoke environmental deterioration	16	Legal strength	
7	The Presidential Decree gives greater solidity	9		
8	To induce sustainable development and conservation, regulation, not prohibition of resource use (is required)	64		
9	The legal framework (should be more explicit and binding)	155		
10	Lack of legal obligations and sanctions for non-compliance	36	A clearer, more explicit and binding legal framework is required	Strengths and weaknesses of the legal framework
11	The confluence of potentially conflicting jurisdictions and attributions in a given territory	49		
M3	It is difficult to target subsidies and programs in priority areas	4	The legal framework makes the spatial and temporal focussing of policy implementation difficult	
12	A long-term planning framework for public policy (is lacking)	46		
M4	The Planning Law (timeframe = a single, six year administration), needs updating	6		
M5	Ecological land-use planning IS the long term planning framework	5		
M6	Conflict between Ecological land-use planning and Territorial planning (of local government)	5	Conflicting spatial approaches	
13	The concept of “territory” is required, to locate the human-nature relationship in geographical space	25		
14	The ecosystem / habitat approach (is required)	12	A more integral and interdisciplinary technical basis is required	
15	The sound scientific and technical basis of the policy, i.e., environmental and socioeconomic data and criteria, etc., (is required)	78		
16	A holistic / integrated approach is lacking	91		
17	Interdisciplinary working (is lacking)	14		
M7	Include non-scientific knowledge	10	Strengths and weaknesses in the implementation of adaptive management	Strengths and weaknesses of the technical basis of policy
18	Indicators and data on local factors and on the results of policy implementation (are lacking)	32		
19	The policy includes monitoring and evaluation	29	Strengths of drainage basin management	
20	The monitoring and evaluation of results (is lacking)	47		
21	[08 Adaptive management] ¶	99		
22	Flexibility in policy implementation (is lacking)	26	Weaknesses of drainage basin management	
M8	Water as an indicator	9		
23	[05 Integrated drainage basin management]	129		
24	Integrated drainage basin management is ideal for territorial management, because it includes all elements and actors	59		
25	Incorporation of the drainage basin management approach in other environmental policies	25	Institutional redesign is	
M9	Incorporation of the drainage basin management approach in other environmental policies	3		
26	The scale of the drainage basin is too large	8		
27	The ideal territorial delimitation for implementing drainage basin management approach is the sub-basin or local basin/watershed	9		
28	A genuine public policy for integrated drainage basin management does not exist	23		
M10	Institutional redesign	12		

M11	Cyclical collapses are necessary for institutional renovation	1	required	Strengths and weaknesses of institutional arrangements
29	Integrated planning and coordination of the areas and policies of the environment sector (are required)	143	Institutional arrangements for fully coordinating the areas and policies of the environment sector are ineffective	
30	There is a need to acknowledge and correct the excessive emphasis on Protected Natural Areas	18		
31	Ecological functionality and biodiversity must be conserved in the wider landscape, outside Protected Natural Areas	26		
32	Communication and dissemination (is required)	75		
33	Nested, decentralized and coordinated administration (is lacking)	45		
34	An administrative entity to coordinate all actors at local level (is required)	31		
M12	With a policy / arrangement like an administrative entity to facilitate collaboration at local level	57		
35	Field staff (are lacking)	10		
36	Effective institutional arrangements for mainstreaming and coordinating between the different sectors and tiers of government (need to be developed)	218		
37	[03 Mainstreaming of the expert's particular policy]	171		Factors that facilitate the mainstreaming and coordinated implementation of policies
38	Subsidy programs and projects	49		
39	Common objectives to facilitate coordination between different actors (are lacking)	44		
40	Prevention and response to natural disasters and social conflicts	11		
41	Government investment that conserves or adds value to Natural Capital, and encourages producer organization	20		
42	Complementarity with other environment sector areas and policies	36		
43	Water as a cross-cutting issue across all sectors and tiers of government	25		
44	In principle, Ecological land-use planning orientates and coordinates the activities of all sectors and tiers of government in a given territory	37		
45	[04 Mainstreaming of other environmental policies]	185		
46	Any policy, according to circumstantial rather than intrinsic factors	13	Policies that facilitate mainstreaming and coordinated implementation	
47	In principle, Protected Natural Areas	12		
48	CONAFOR's payment for environmental services policy	7		
49	Other policies / arrangements	45		
M13	REDD+ early action sites policy	12		
M14	Biological Corridors	8		
M15	Community Ecological land-use planning	7		
M16	Rural Development Districts	6		
M17	The Crusade against Hunger	4		
M18	Environmental Impact Assessment	4		
M19	National Development Plan and Sector Programs	4	The full participation of all actors and stakeholders is required	Stakeholder participation and capacity building are needed at all levels
M20	Climate Change Policy	3		
M21	Basin Commissions	2		
M22	Wildlife units	2		
M23	Planning Committees for State Development (COPLADES)	2		
M24	Inter-Secretarial Commissions	1		
50	Inter-personal work relationships can advance environmental policies and issues	18		
51	Participation of organized landowners and producers in the design and comanagement of natural resource policy (is required)	141		
52	Full participation / appropriation by organized civil society, i.e., NGO's, academics, etc., (is lacking)	136		
53	Participation / appropriation by state and municipal governments (is lacking)	60		
54	A society and end users with better education and capacity development are needed	33	Better organized and skilled local and social stakeholders are needed	
55	Well organized producers / social actors (are needed)	35		
56	A lack of trained and committed technical experts	13		
57	A lack of technical, political and budgetary capacities in state and municipal governments	50		
58	The interviewee understands the concept	45		
M25	The interviewee does not seem to understand the concept of adaptive management	3		More personnel with adequate capacity and training are needed in
59	The interviewee confuses "governance" with governability or government	18		
60	The interviewee did not venture a definition	8		

61	The lack of environment sector personnel with adequate capacity and training	71	the environment sector	
62	Negative repercussions of changing personnel and priorities with each administration	50	The strength and direction of environmental policy changes with administrations	The strength of environmental policy depends more on the personal convictions of political leaders than on institutional strength
M26	Backtracking by the current administration	25		
M27	Advances in the current administration	3		
M28	The strength of environmental policy depends a great deal on the incumbent President	8	Lack of priority and political commitment	
M29	There is a lack of leadership from the Environment Minister	3		
63	Effective political commitment, leadership and prioritizing (is lacking)	148		
M30	Deficiencies of PROFEPA [Federal Attorney General for Environmental Protection]	17	Lack of institutionality from environmental authorities	
64	Environmental authorities should do more to uphold and enforce the law	50		
M31	CONAGUA: Powerful but lacking a vision and policies which are integral and institutional	40		
65	The cultural inertia of centralized authority needs to be overcome	32	Corruption, abuses of power and lack of transparency	A crisis of governance exists in Mexico
66	The lack of institutionality in public administration, due to cultural factors and to political and economic vested interests	99		
M32	Ecological land-use planning was not utilized	3		
67	It is counterproductive that environmental authorities themselves engage in corrupt practices, abuses of power and law breaking	28	Crises of trust, of values and of security, in Mexican society	
68	A healthy, i.e., non-clientelist, relationship between authorities and social actors (is lacking)	11		
M33	¿Paternalism / clientelism?	11		
69	Delays and bureaucratic complications	22	Effective management relies on environmental governance	
70	Transparency and accountability (is lacking)	36		
71	Credibility of authorities (is lacking)	11		
72	The lack of trust that exists in Mexican society, is a barrier	27	Governance is not a political priority	
73	A culture and values of democracy and legality in Mexican society are lacking	50		
74	The common good approach is lacking, and self-interest or group-interest predominates	37		
75	(Attention to) Poverty and social necessity	44	Deficient application of environmental policies limits their success	
M34	Insecurity, criminality	12		
76	[06 Environmental governance]	123		
77	It is fundamental / very important for effective implementation	52	Similarities between the socioecosystem approach and environmental policies	Advantages are perceived in the integrality of the socioecosystem approach
78	Policies which rely on, or promote, governance	18		
79	[07 How to improve governance]	135		
80	Governance has not been defined, adopted or prioritized, politically	23	The socioecosystem approach offers advantages because it is holistic	
81	It is a political fad	15		
82	Governance (is lacking)	23		
83	Deficiencies of application	115	Others	
84	[02 Obstacles to success]	314		
85	[11 How to improve environmental policy?]	192		
86	It is not a successful policy	8	The socioecosystem approach offers advantages because it is holistic	
M35	Forestry units do still exist	3		
M36	CONAFOR: Counterproductive forestry policies	8		
87	[09 The socioecosystem approach]	84		
88	Is the socioecosystem approach similar to your policy? Yes, or somewhat	28		
89	Is the socioecosystem approach similar to your policy? Doubts about this	11		
90	Is the socioecosystem approach similar to your policy? No, or very little	15		
91	Doubts about the implementation of the socioecosystem approach in practice	22		
M37	It may not be compatible with the social policies of SEDESOL [Ministry for Social Development]	3		
92	[10 Does the socioecosystem approach offer advantages or disadvantages?]	61		
93	Advantages, because it is holistic	39		
94	The socioecosystem approach will facilitate integral management	8		
M38	The socioecosystem approach concept is starting to be adopted in public policy in Mexico	3		
95	[01 Contributes to success] #	151		
M39	It seems that this is not describing a Wildlife unit	1		

Source: Compiled from the code and memo lists generated in *Atlas-ti*, using inductive analysis based on grounded theory (Patton, 2002; Hernández-Sampieri et al. 2006).

Notes:

† = Numbers with the prefix “M” refer to the 39 memos, the others refer to the 95 codes.

‡ = Frequency (*f*) of use of the code or memo (number of associated quotations = *groundedness*).

§ = Dashed lines separating categories indicate they can be thought of as grading into each other and share adjacent codes.

| = A suffix in parenthesis such as “(is lacking)”, signals that a code can have a positive connotation (without the suffix) or a negative connotation (with it). In “(Attention to) Poverty and social necessity”, this logic is reversed.

¶ = Numbered codes in squared brackets are question codes.

= This code appears here because for the experts, obstacles outweigh by 2:1 the factors contributing to policy success.