ACIAR Project LPS2001/094

"Sustainable development of grasslands in western China" Workshop

Policy settings to address grassland degradation and sustainable development in western China

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Sustainable Development in Western China

Managing People, Livestock and Grasslands in Pastoral Areas

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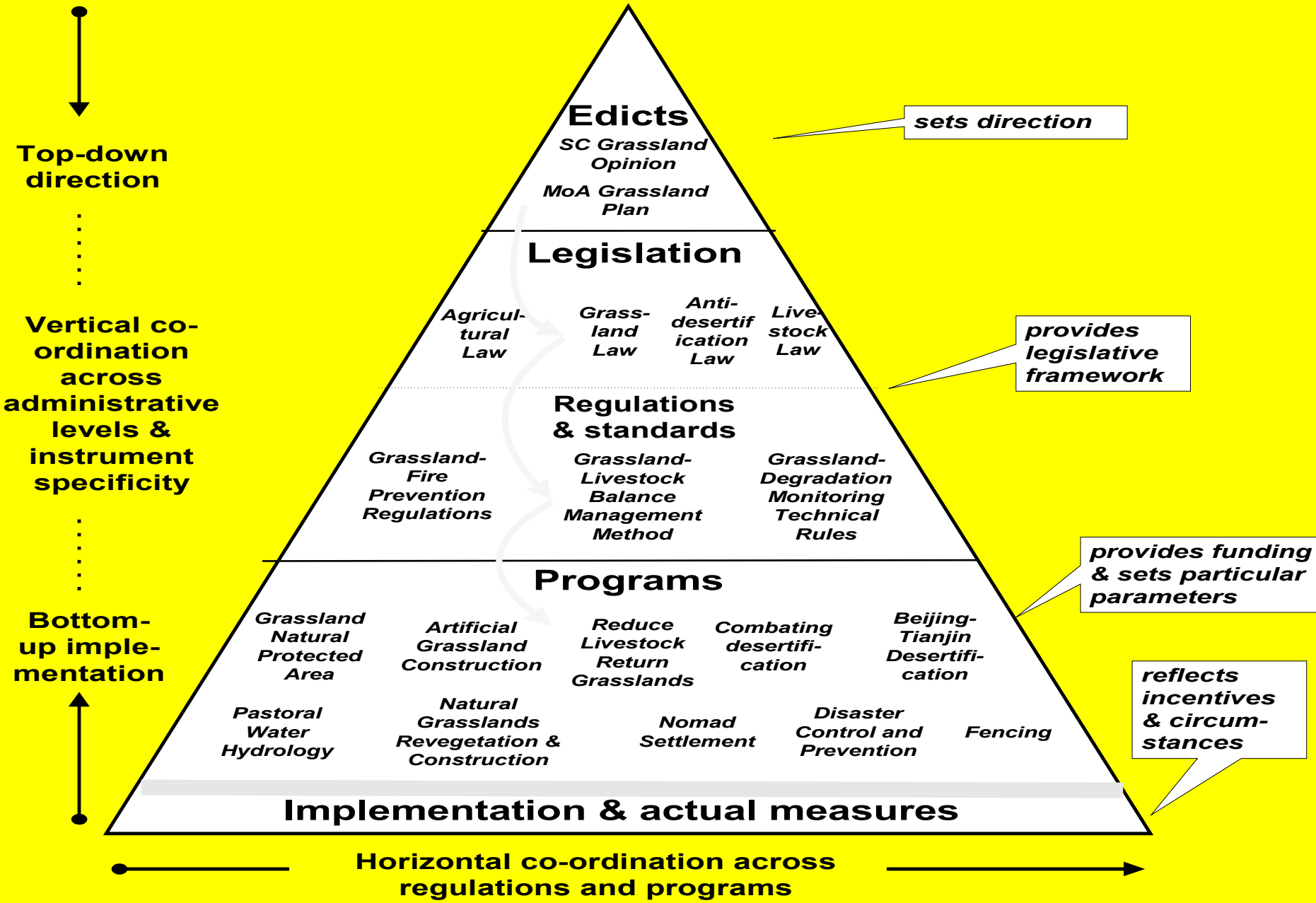
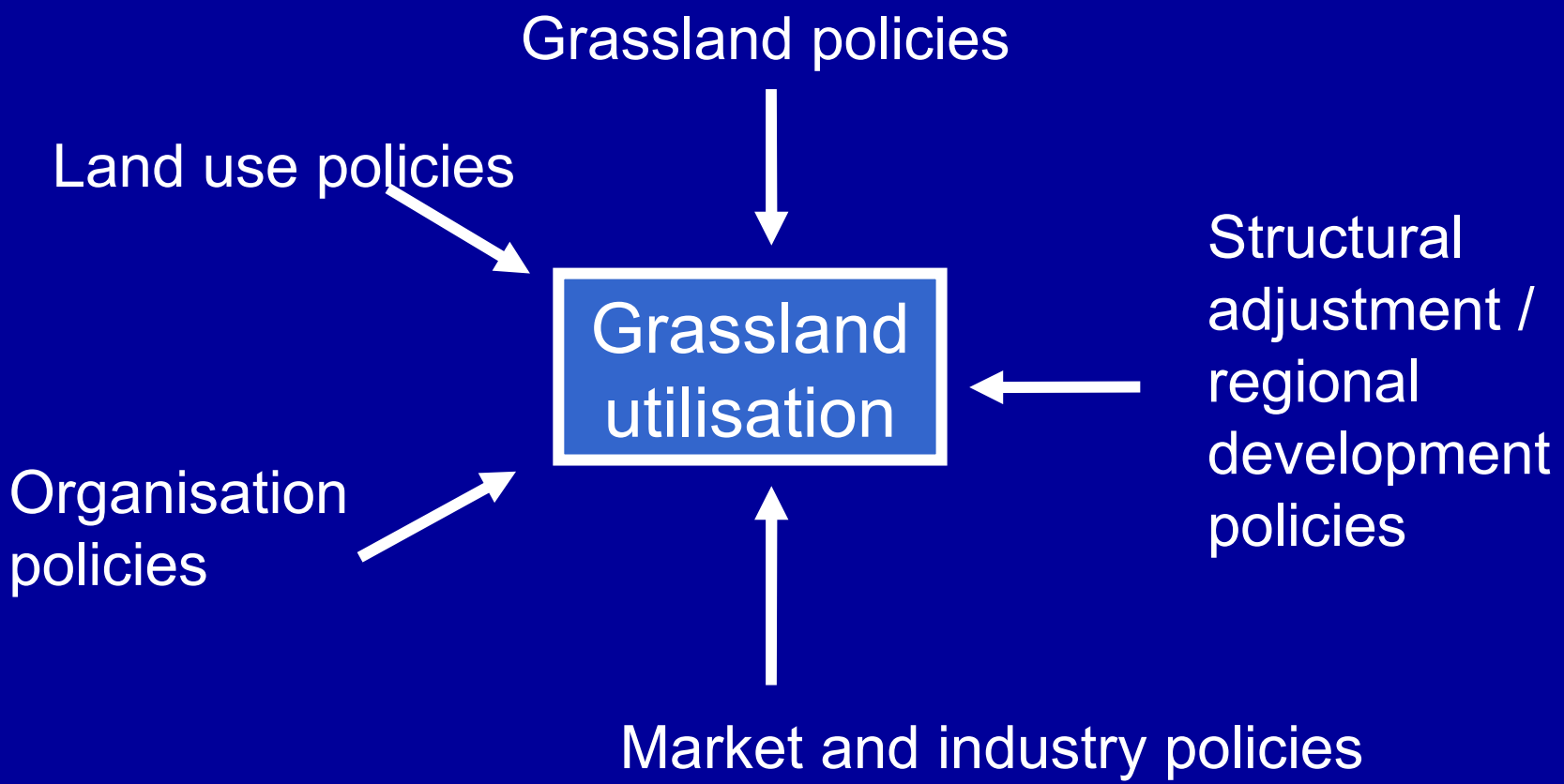
Policy pyramid



Policy/legislative areas impacting on grassland utilisation

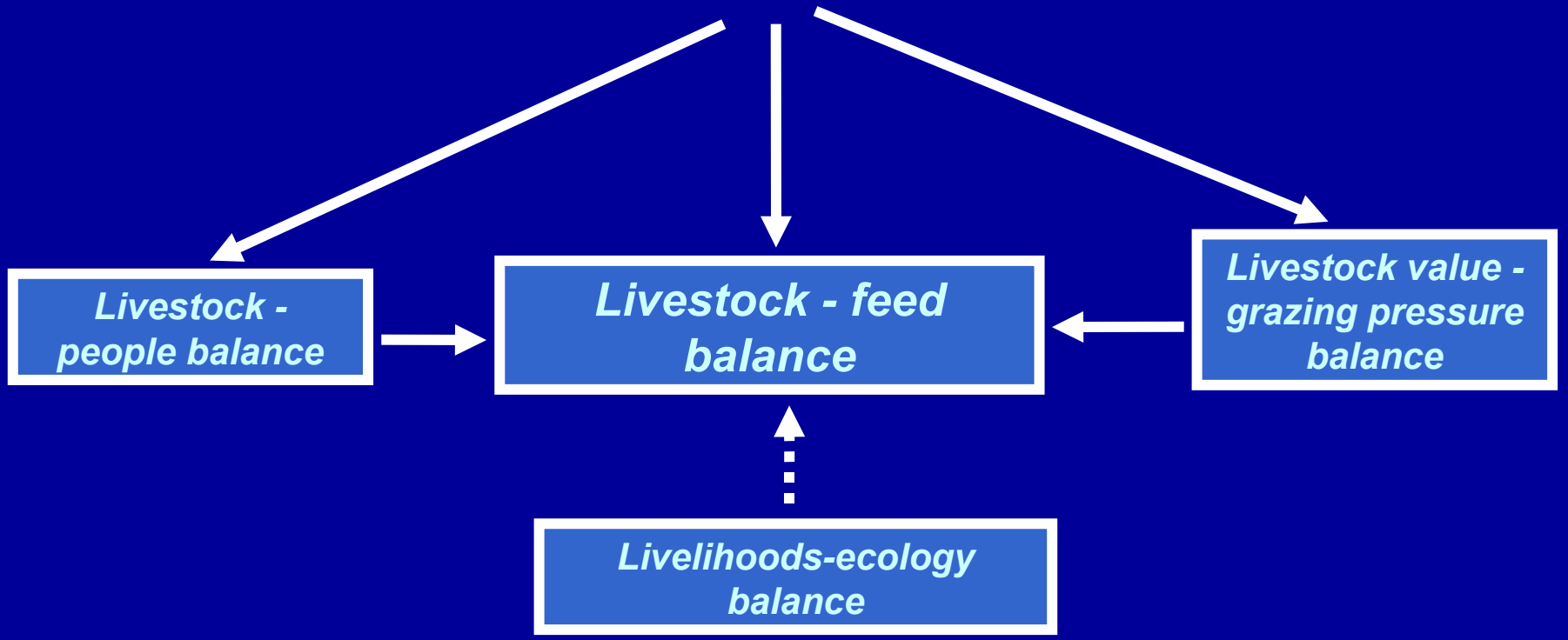


Policy consistency

- ***Consistency across edicts, legislation, regulations, programs and projects***
- ***Consistency across the various programs***
- ***Consistency across broad legislative areas***

Policy challenge and “balance”

- ***under current and likely future technologies and economic conditions, there are too many ruminant livestock in pastoral areas***
- ***Policy questions and responses can be framed as a series of “balances”***



Column		A	B	C	D	E	F	G	H	I
		All counties		Pastoral and semi-pastoral counties			Updated productivity		Updated productivity & account for improved pastures	
Province	Seasonal grassland type	Useable grassland	TSC (Theoretical stocking capacity)	TSC	ASN (Actual stock numbers)	ASN as % of TSC	TSC	ASN as % of TSC	TSC	ASN as % of TSC
Unit		--m ha--	--m LSU--	--m LSU--	-m LSU--	--%--	--m LSU--	--%--	--m LSU--	--%--
Qinghai	Warm season grasslands	15.74	56.72	55.02	43.38	79	36.73	118	40.40	107
	Cold season grasslands	15.86	27.25	26.43	35.56	135	17.64	202	19.41	183
	All grasslands	31.53	29.00	28.13	39.47	140	18.78	210	20.66	191
Tibet	Warm season grasslands	43.2	57.48	50.01	45.65	91	33.38	137	36.72	124
	Cold season grasslands	16.26	15.74	13.69	37.94	277	9.14	415	10.05	377
	All grasslands	59.46	27.08	23.56	41.79	177	15.73	266	17.30	242
Xinjiang	Warm season grasslands	19.79	53.70	35.98	40.60	113	22.49	180	24.74	164
	Cold season grasslands	28.21	32.13	21.53	33.40	155	13.46	248	14.80	226
	All grasslands	48.00	32.24	21.60	37.00	171	13.51	274	14.86	249
Inner Mongolia	All grasslands	63.59	44.20	35.80	78.64	220	21.65	363	23.82	330

Livestock-feed balance

- *seeking a balance between livestock feed required and feed available is crucial in sustaining ruminant livestock systems in pastoral areas*
- *But should this balance be used as a* ***Guide*** *or* ***Quasi-legal instrument?***
  - ***Robustness of estimates of feed required and available given diversity of grasslands and feed & livestock systems in China***
  - ***In practice used as both***
- ***Where used in the quasi-legal role, need for updated and case specific estimates of livestock and feed parameters***

Technical interventions and livestock-feed balance

- ***Technical interventions put at forefront of resolving livestock-feed imbalance***
- ***Manifest in various ways but with special focus on:***
  - ***pasture improvement and fencing***
  - ***livestock improvement***
  - ***Disease control and livestock infrastructure***
  - ***Rodent and insect control***

Technical interventions and livestock-feed balance (2)

- ***Vital to see technical interventions as part of the solution rather than the whole solution***
- ***Although technical interventions can not solve grassland degradation in China alone, they can form a key part of the solution***
  - ***Improve competitiveness of livestock systems***
  - ***Cost effectiveness and efficiency in implementing various system changes***

Sustainability of technical interventions in livestock-feed balance

Household frame of reference

- *skills*
- *Access to inputs and resources and opportunities*
- *Align with objectives and other household systems*

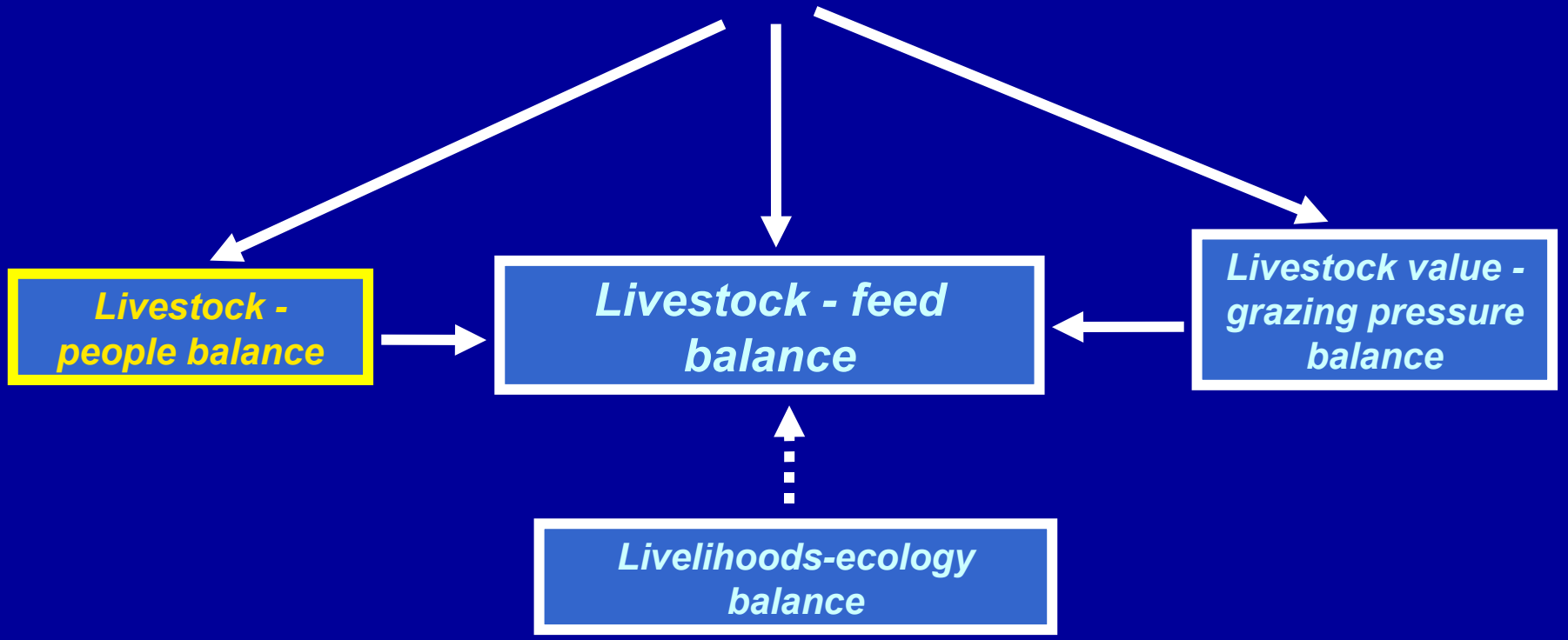
- Tailor interventions to specific case
- Integrate as package that includes extension and training

Economic viability

- *Comparative advantage of alternative livestock systems*
- *Comparative profit and livelihood analysis of interventions*
- *Cost benefit analysis of grassland and livestock investments and programs*

- "value add" existing knowledge and information

Policy challenge and “balance”



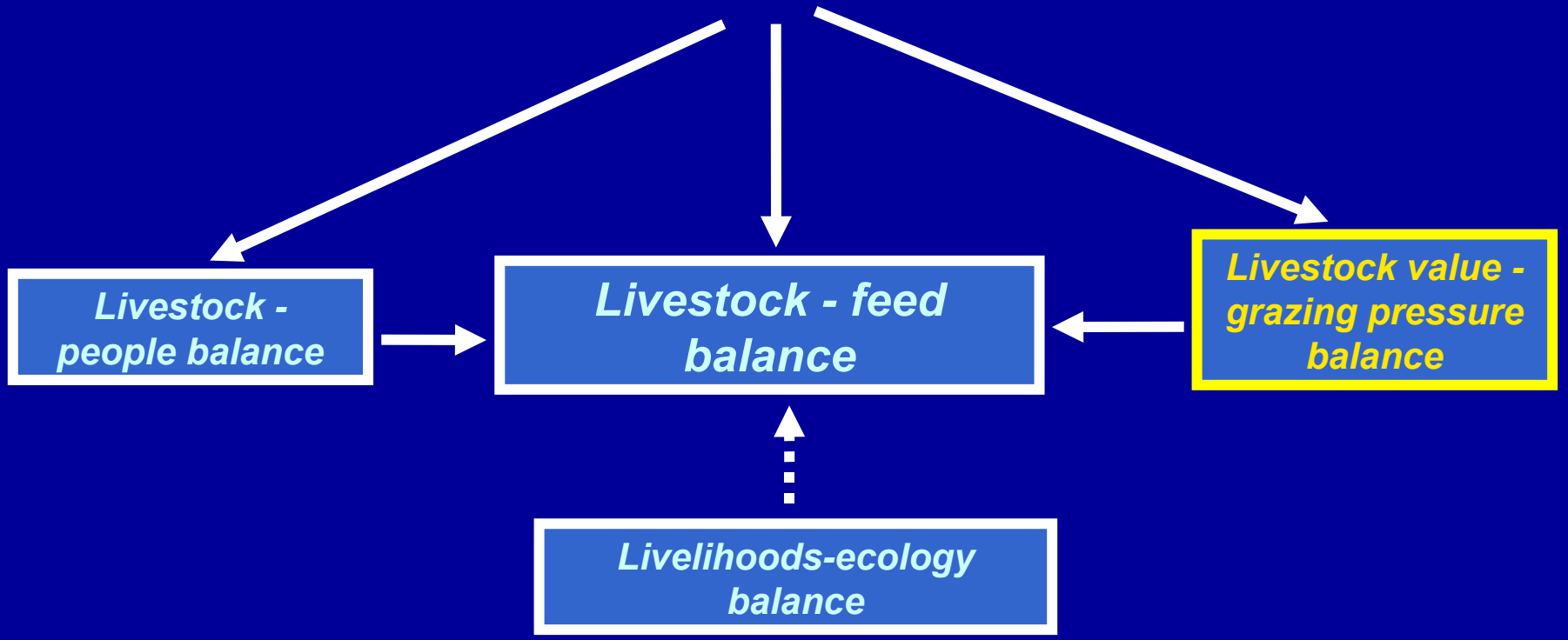
Livestock-people balance

- ***Close link between livestock and human numbers in pastoral areas***
- ***awareness of the need to "manage" people in dealing with the issue of grassland degradation***
  - ***Fewer households or less reliance on grazing livestock as primary source of income***
  - ***Seen as way of sustaining livestock systems and pastoral households***
  - ***Driven by other issues (provision of basic services)***

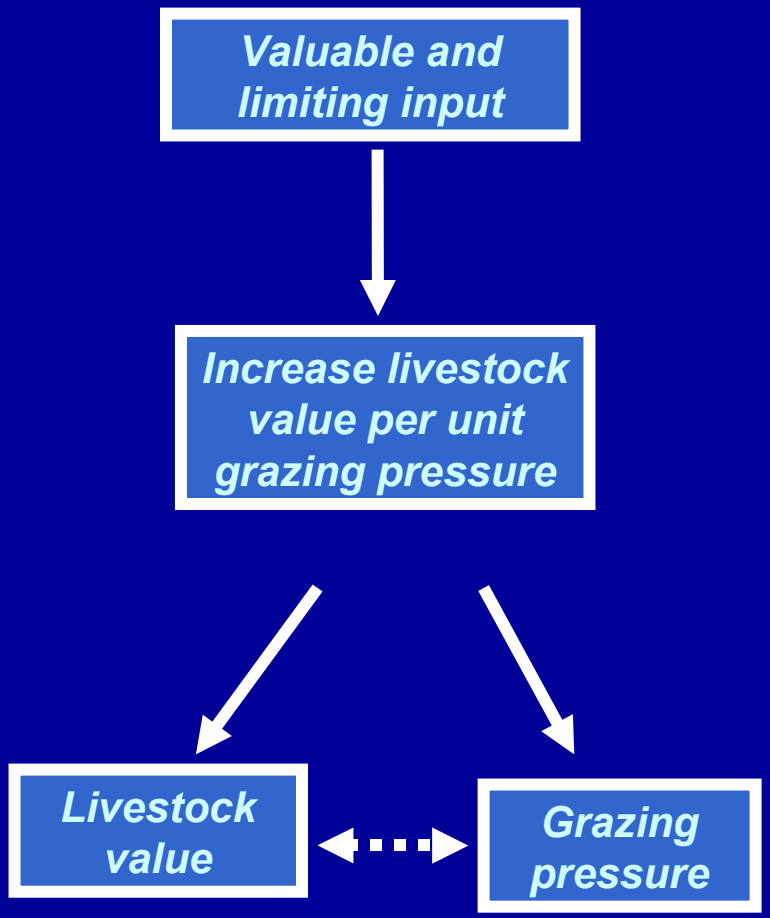
Livestock-people balance (2)

- ***But do all pastoral households benefit from regional development and structural adjustment measures and settlement programs?***
  - ***More targeted programs may be needed to aid poorer and disadvantaged households take advantages of the opportunities afforded by economic growth and transition***

Policy challenge and “balance”

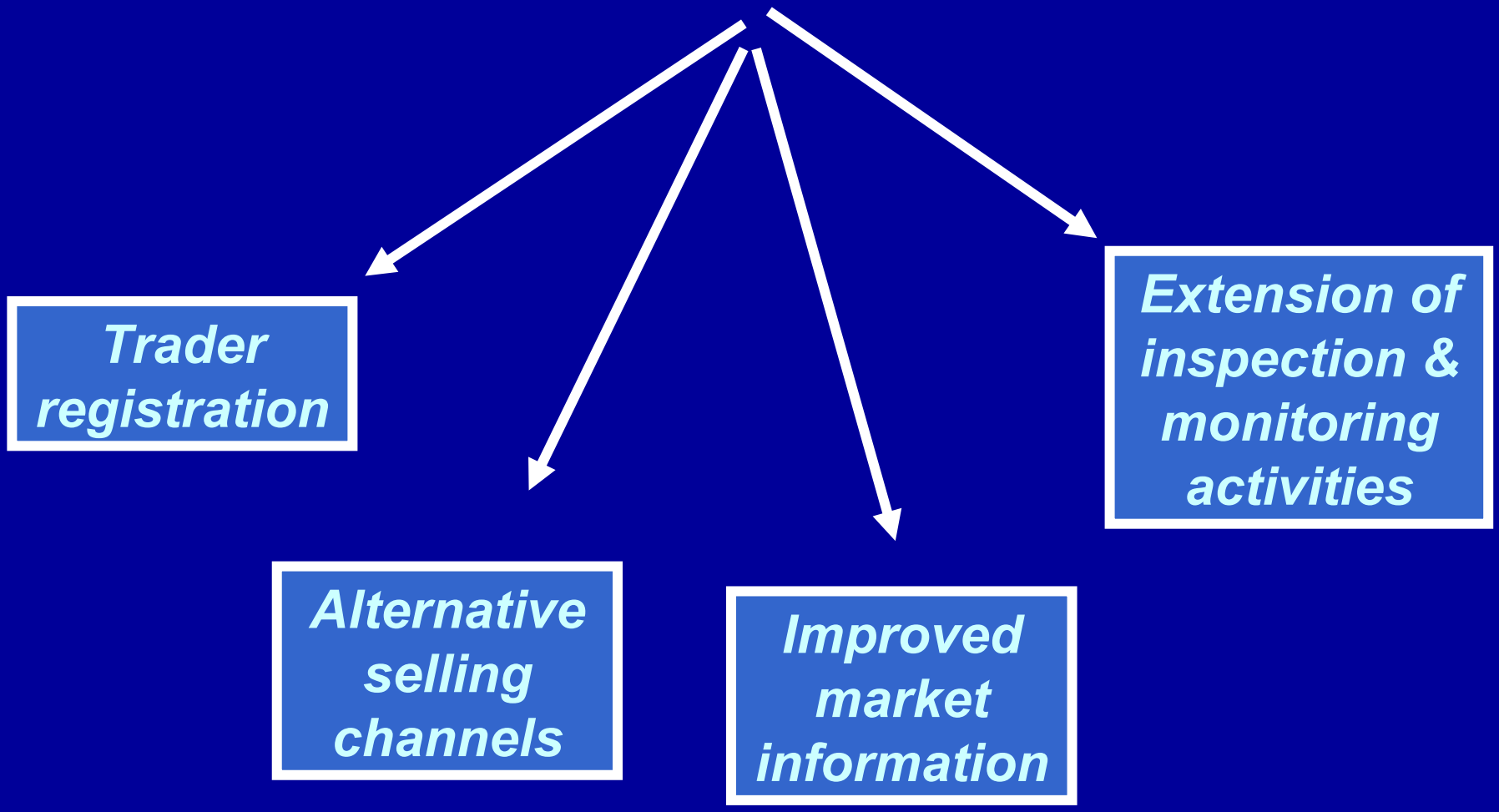


Livestock value-grazing pressure balance



- Price vs profit
  - Analysis of additional revenues and costs
- Producing premium products only of benefit if producers can receive "accurate" prices
  - More liberal markets have not necessarily led to more accurate or fair prices

Improving price accuracy



Concluding remarks—grassland complexity and policy formulation and assessment

- The multiple values and dimensions of grasslands in China poses major challenges for Chinese policy makers not only in formulating and evaluating specific grassland policies but also in being aware of how policies in other areas can impact on grasslands and herders
- Within this complex system and policy environment, dealing with unintended or unforeseen adverse impacts and maximising consistency among the various policies is an ongoing and demanding task.

Concluding remarks—mega-policy directions in China and their application and impact in pastoral areas

- Broad policy directions within China such as market reforms, the facilitation of economic growth and structural adjustment, and industry modernization are all apparent within the pastoral region and all impinge on grassland utilisation.
- But their manifestation in pastoral areas can differ from other areas and from other parts of Chinese society and pro-active efforts to tailor these measures to the characteristics and needs of pastoral areas is needed if their full potential is to be realised.