

Agricultural Extension System in Federal Nepal: Current Issues and Way Forward



National Policy Dialogue

Agricultural Extension System in Federal Nepal

9 April 2019, Kathmandu

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Outline of the presentation

- Background: Current state, major issues and challenges of agri. Sector
- Agricultural extension at crossroads
- Emerging issues and challenges of agricultural extension and advisory services
- Linkage mechanisms between various units under different governments and their roles and responsibilities
- Strengthening Linkage between Research-Extension-Education

Background: Current state, major issues and challenges of agri. sector

Current state of agri. sector growth and development

- **Agriculture in Nepal is at low development stage**
 - Low productivity of major crops
 - Crop production still largely depends on monsoonal rains
 - Low use of modern inputs
 - use of modern and advance technology relatively poor
 - Agriculture commercialization and modernization happening *albeit* at a very slow pace
 - Labour productivity is low

Some major issues of the agri. sector

- Land fallowing and plotting increasing
- Extreme climatic events increasing
- Labour shortage and feminization of agriculture growing
- Cost of production increasing rendering the agriculture less profitable and attractive business
- Hard to get quality farm inputs on time and at reasonable price
- Land degradation and dwindling natural resources
- Decreasing soil fertility status
- lack of assured market and reasonable price of farm produce
- Poor level of value addition
- Nepali farm produces facing fierce competition with Indian produces
- **Agriculture and food import bills growing, so is trade deficit**

Urgent tasks...

- putting a halt on quitting the agriculture by farmers
- attracting youths in agriculture
- providing need and demand based technology and technical service to farmers and entrepreneurs
- conserving local cultivars and landraces and put a halt on rapid loss of agro-biodiversity
- developing and adopting adaptation measures for climate change related extremes
- reducing cost of production
- checking the increasing trend of land fallowing and use of agri. land for non-agri. purposes
- improving agricultural marketing and trade

- agriculture growth and development is a complex phenomenon
- agricultural extension and advisory services could play a crucial role in overcoming most of the challenges the agriculture sector currently facing
- However, agricultural extension system in Nepal is seemingly less effective and capable to assume the expected role and hence is at crossroads
- agricultural extension service has increasingly come under scrutiny for mediocre performance and for being less effective in recent times
- MoALD, R-E-E institutions and agriculture professional as a whole are being attacked or criticized for under performance



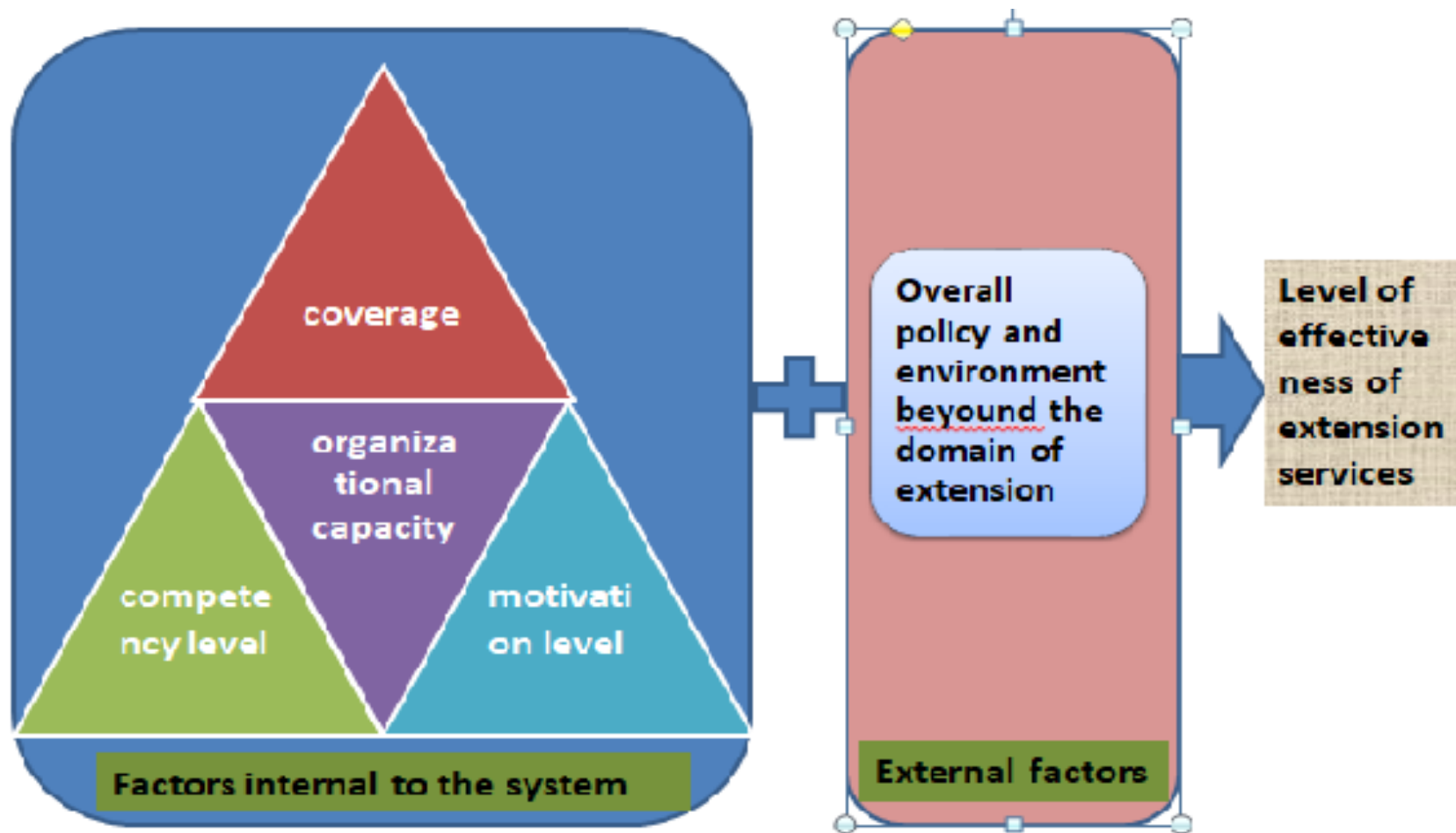
**Agricultural extension
at crossroads**



Two types of issues in extension system

- General issues
- Emerging issues and challenges in the federal context

Conceptual framework of effectiveness of extension and advisory services in Nepal



Adapted from Shrestha, RK and Sanjel, P (2018)

Overall policy and environment beyond the domain of extension

- general lack of policy consistency as new policies are brought in without sufficiently evaluating existing policies against their envisaged purposes. There is a rare practice of policy monitoring and evaluation.
- a poor functional linkage between research, extension and education (R-E-E) institutions.
- inadequate policy and funding support from the government for R-E-E functions.
- Performance of public extension system has also been negatively impacted by the weak national research system and less effective national agriculture education system.

Overall policy and environment beyond the domain of extension

- national extension system- less capable and poorly equipped to cater present day's farmers' and entrepreneurs' need
- agriculture education system- producing graduates well versed in theory but having less practical knowledge and skills that are in demand in the real field

Overall policy and environment beyond the domain of extension

- quality issues of mid-level technicians increasing due to mushrooming of private agri. college/school/training centers

Other factors

- long-pending and emerging land use related issues;
- crop production heavily dependent on monsoonal rains as only around 30% of total cultivable land has assured irrigation facilities;
- farm input management issues (quantity, quality, timeliness and price);
- labour unavailability and high cost of labour;
- poor access of large majority of farmers and entrepreneurs to institutional credit;

Overall policy and environment beyond the domain of extension

- poor farm to market connectivity;
- lack of assured market and reasonable price of farm produce; increasing trend of extreme weather patterns and climate related hazards;
- challenge of meeting WTO obligations and standards; and
- disproportionate reciprocal arrangement in agriculture trade with India

structural constraints

- domination of smallholders and small scale farming;
- small size of parcel that too widely scattered; and
- difficulty in movement and transport due to remoteness, rugged terrain and poor connectivity

Emerging issues and challenges of agricultural extension and advisory services in federal context

- As per the article eight of the constitution, the Local Level has two extension related rights, namely; 'agriculture production management' and 'management, provision and regulation of agricultural extension'
- As per the constitutional provision, most of the extension functions have been vested on the local level government.
- Accordingly, most of the extension functions that were previously under the purview of then Ministry of Agriculture Development (MoAD) and its central and district level units have been now vested in the province and local levels.
- Preliminary impressions of the implementation has shown a number of issues cropping up

1. Poor coordination between three tiers of government

- Lack of proper understanding of roles and rights
- Lack of policy consistency
- Duplication in program approach and intervention
- No adequate attempts have been made to clarify roles of different levels of government
- Governments, in general, seem unwilling to delegate power and authority to lower level governments
- Strong territorial mindset of political authorities

2. Issues in extension policy, programming and funding priority

- Extension and advisory services not getting policy and funding priority
- In some cases, provincial governments have been found more inclined towards program implementation rather than formulating appropriate policy and support framework to tackle the present day challenges in farm sector and farmers' welfare
- Provincial and local level programs are heavily loaded with subsidies and handouts distribution than on improving extension and advisory services
- Political representatives more interested in subsidies and handouts administration rather than in improving extension and advisory services

3. Structural and institutional issues and challenges

- A massive organizational restructuring within the MoAD has divided prior extension units into federal, provincial and local level units.
- Many previous central level technical units have been abolished, merged or made slimmer
- Moreover, previous functional linkages and technical line-of-command between central, regional and district levels have been ceased with negative impacts on extension service delivery which has already become evident.
- The functional vertical linkage previously existed in different layers, between centre to grassroots, of extension administration has been ceased or terminated.

4. Quality control of extension and advisory services

- Service providers increasing but with only little regard to basic extension function and approach
- No regulation mechanism in place

5. Human resource related issues

- Poorly motivated and working with low morale
- Chaotic staff adjustment process with differential treatment to staffs entered as per the same 'Civil Service Act'
- Career development path seems not very attractive and clear
- Capacity building mechanisms not clear

6. Issues in pluralistic extension

- Lack of clear framework
- Poor coordination and synergy
- Lack of standard for service provision

Negative impacts of current state-of-affairs

- There is a clear lack of a formal mechanisms for direct communication and coordination between extension units at different levels of government
- Due to lack of such mechanism, implementation of national policies and programs have become uncertain and have also been negatively affected
- Due to lack of such mechanisms collection and verification of production forecast and various other agricultural statistics have been seriously affected

Negative impacts of current state-of-affairs

- Farmers and entrepreneurs are facing the problems with getting extension and advisory services as they used to get in the past
- The present chaotic situation could potentially lead to adverse impact on overall performance of the sector
- Coordination and communication issues between PMAMP Super Zones and Zones Implementation Units and the extension units under provincial governments
- due to absence of direct vertical link between various agriculture development/extension units under different governments technology transfer and feedback process have been severely affected

Negative impacts of current state-of-affairs

- It is a positive development that most of the extension functions have been handed over to lower level governments
- However, there is a danger that extension clients may be denied needed extension supports and services owing to potential lack of capacity of these governments.
- There are concerns that provisioning demand-driven and responsive extension and advisory services to the needy farmers and agribusinesses could be compromised if the capacity of local level government is not urgently enhanced.

How can the recent restructuring of MoALD better support the farmers and entrepreneurs?

- The recently concluded organizational restructuring of MoAD has resulted into a number of new and reorganized institutions right from the centre down to the grassroots under all the three levels of government.
- The proper implementation and utilization of these institutional innovation within the framework of MoALD is the foundation of extension reforms for revitalizing agricultural extension.
- strengthening linkages between agricultural research, extension and education will also play a crucial role in revitalizing extension services in the changed context.

National Centres

- nine central agencies, three under MoAD and six under DoA, as the centre of excellence for particular crop or commodity and related services.
- Such centres are entrusted with acting as the 'Centre of Excellence' for the respective crops and areas.
- They are the national centres which are authorized to acquire and disseminate innovative and needed technologies and provide related support services to the producers and agribusinesses.
- These agencies are also responsible for capacity development of extension agents in meeting the technological need of and solving problems being faced by farmers and agribusinesses across the country.

Agribusiness Promotion Support and Training Centre at the **Provincial Level**

- Agribusiness Promotion Support and Training Centre (AbPSTC) has been established in each of the seven provinces.
- These centres work under the provincial Ministry of Land Management, Agriculture and Cooperatives (MoLMAC) are mandated for
 - providing agribusiness incubation services and
 - business supports to start-ups and established agribusinesses.
- They will also provide pre-incubation services for unemployed youths, who are willing to embark on agribusiness thereby helping to abate the trend of outmigration.
- AbPSTCs also help grow agribusiness incubation centres and provide necessary supports to the latter.

Agriculture Knowledge Centre at the **Provincial Level**

- One of the major weaknesses of present day extension system is poor technical competency of extension agents.
- Agriculture Knowledge Centre (AKC) is an important institutional innovation recently rolled out in Nepalese extension system In order to help correct this weakness through upgrading and updating knowledge and skills of field extension workers in serving farmers and entrepreneurs.
- 51 such centres across the country under the provincial Directorate of Agriculture Development.

Agriculture Knowledge Centre at the **Provincial Level**

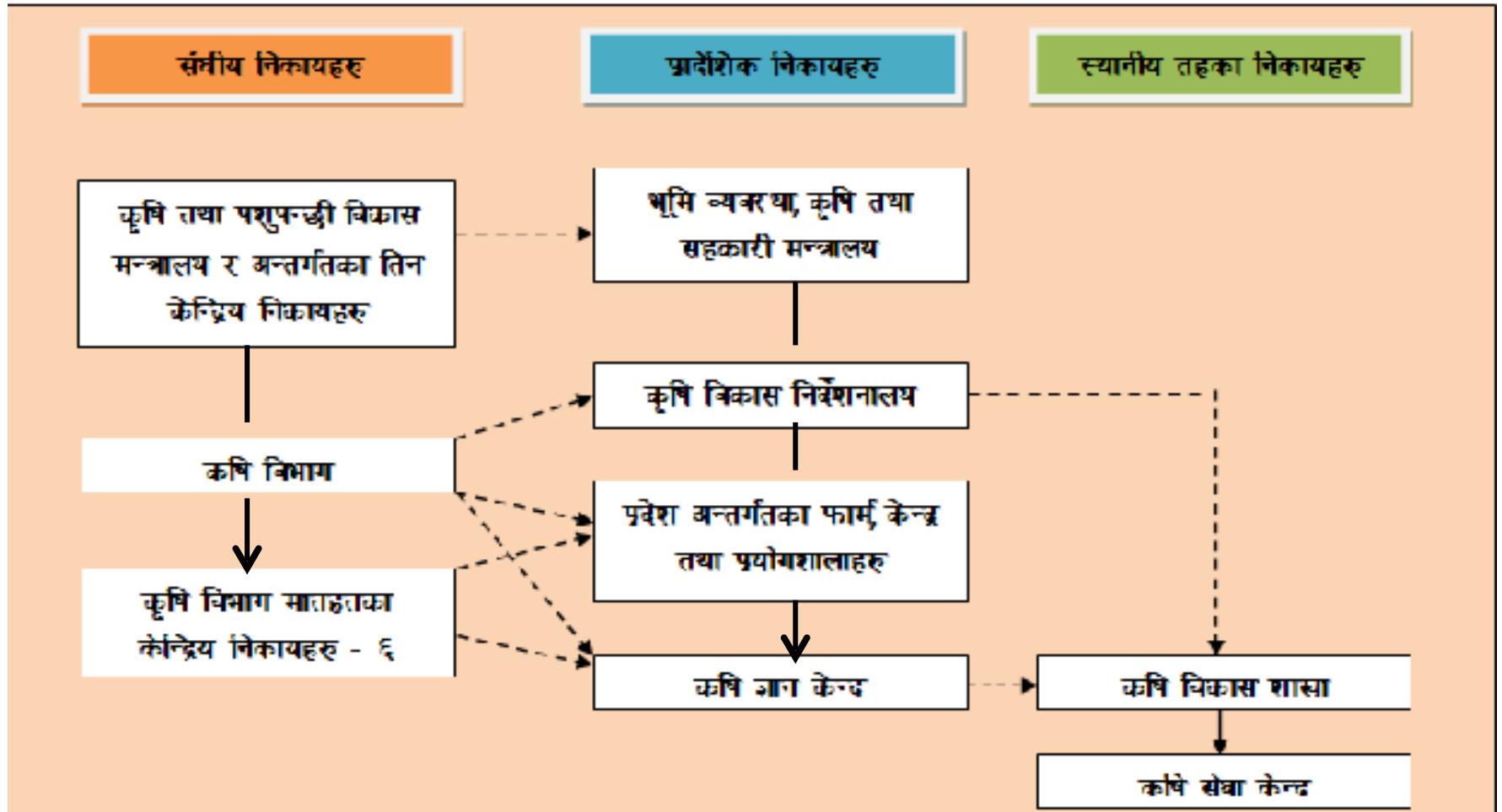
- They also provide expert service to the farmers and entrepreneurs in various aspects of farming and enterprise development including expert advice, mentoring, training, laboratory services, and so on.
- They also help provide solution to the problems related to crop production and management through carrying out small trials and demonstrations.
- **AKC is not supposed to administer subsidies and handouts to the farmers and entrepreneurs and focus solely on knowledge validation and dissemination.**

Agriculture Development Section and Agriculture Service Centre at the **Local Level**

- A dedicated section to look after the affairs related to agri. policy, planning, monitoring and regulatory function, and so on, has been set up in each Municipal and Rural Municipal.
- However, there is a need to increase the staff strength and capacity to improve the service quality.
- Agriculture Service Centre (ASC) is the grassroots based extension units of public extension system.
- The number of ASC has been increased from 378 to 753 to cover all local levels.
- This increase in number of ASC will surely increase the coverage of extension service. This is also expected to enhance the quality of the services.

Linkage mechanisms between various units under different governments and their roles and responsibilities

Linkage mechanism between agriculture development/extension units under different governments



संकेत

- प्रत्यक्ष सम्पर्क
- - -→ अप्रत्यक्ष सम्पर्क

Coordination mechanisms for agriculture development/extension

संघ र प्रदेश कृषि विकास निर्देशन समिति

- संघीय कृषि तथा पशुपन्क्षी विकास मन्त्रालय र प्रादेशिक भूमी व्यवस्था, कृषि तथा सहकारी मन्त्रालयविच समन्वय र सहकार्यको लागि संघीय कृषि तथा पशुपन्क्षी विकास मन्त्रीको अध्यक्षता एक संघ र प्रदेश कृषि विकास निर्देशन समितिको व्यवस्था हुनु पर्ने देखिन्छ ।

संघ र प्रदेश कृषि विकास निर्देशन समितिको गठन

- माननीय मन्त्री, संघीय कृषि तथा पशुपन्क्षी विकास मन्त्रालय
- अध्यक्ष
- माननीय मन्त्री, प्रादेशिक भूमी व्यवस्था, कृषि तथा सहकारी मन्त्रालय (सातै प्रदेश)
- सदस्य
- सचिव, संघीय कृषि तथा पशुपन्क्षी विकास मन्त्रालय
- सदस्य सचिव

संघ र प्रदेश कृषि विकास निर्देशन समितिको कार्यविवरण

- राष्ट्रिय कृषि नीति, योजना, कार्यक्रम, मापदण्ड, कानून आदिको पहिचान तथा तर्जुमामा समान धारणा विकास एवं संघीय सरकारलाई पृष्ठपोषण,
- संघीय कृषि नीति, योजना, कार्यक्रम, मापदण्ड, कानून लगायत विषय कार्यान्वयनको नीतिगत, कानूनी, संस्थागत व्यवस्थाको पहिचान र कार्यान्वयनको व्यवस्था,
- संघीय कृषि नीति, कानून, मापदण्ड लगायतका विषयमा एकरूपता तथा सामान्यस्यता कायम गर्ने गराउने व्यवस्था,
- संघ र प्रदेशका कृषि विकासका निकायहरुविच अधिकार तथा कार्य क्षेत्र सम्वन्धि समस्या वा विवादको निरूपण गर्ने,
- कृषि विकासका लागि प्रदेशमा जाने संघीय स्रोत बाँडफाँड (सशर्त अनुदान, विशेष अनुदान र समपुरक अनुदान) को लागि संघीय मन्त्रालय मार्फत राष्ट्रिय प्राकृतिक स्रोत तथा वित्त आयोगमा सिफारिश गर्ने,
- संविधान तथा मौजुदा कानूनको अधिनमा रहि दुई तहविच सहकार्य तथा समन्वय सुदृढ गर्नको लागि गर्नु पर्ने आवश्यक अन्य कार्यहरु

संघ र प्रदेश कृषि विकास निर्देशन समितिको बैठक चौमासिक अवधिमा कम्तिमा एक पटक बस्ने र सो को व्यवस्थापन संघीय कृषि तथा पशुपक्षी विकास मन्त्रालयले गर्ने ।

संघ र प्रदेश कृषि विकास समन्वय समिति

- संघ र प्रदेश कृषि विकास निर्देशन समितिलाई प्राविधिक रूपमा सघाउन संघीय कृषि तथा पशुपन्क्षी विकास मन्त्रालय र प्रादेशिक भूमी व्यवस्था, कृषि तथा सहकारी मन्त्रालयविच समन्वय र सहकार्यको लागि संघीय कृषि तथा पशुपन्क्षी विकास सचिवको अध्यक्षता संघ र प्रदेश कृषि विकास समन्वय समिति गठन गर्नु उपयुक्त हुने ।

संघ र प्रदेश कृषि विकास समन्वय समितिको गठन

- सचिव, संघीय कृषि तथा पशुपन्क्षी विकास मन्त्रालय
- अध्यक्ष
- प्रदेश सचिव, प्रादेशिक भूमी व्यवस्था, कृषि तथा सहकारी मन्त्रालय (सातै प्रदेश)
- सदस्य
- सह सचिव, संघीय कृषि तथा पशुपन्क्षी विकास मन्त्रालय
- सदस्य सचिव
-

संघ र प्रदेश कृषि विकास समन्वय समितिको कार्यविवरण

- संघ र प्रदेश कृषि विकास निर्देशन समितिको कार्य एवं निर्णय प्रकृत्यामा प्राविधिक पृष्ठपोषण तथा सहजीकरण गर्ने,
- निर्देशन समितिको निर्णय कार्यान्वयनको आवश्यक व्यवस्था गर्ने,
- प्रदेश मन्त्रालय र मातहतका निकायहरू र कार्यरत जनशक्तिको प्राविधिक र व्यवस्थापकिय क्षमता विकास सम्वन्धि कार्यक्रम पहिचान र कार्यान्वयनको व्यवस्था गर्ने,
- संघीय कृषि नीति तथा कार्यक्रम बारे जानकारी एवं कार्यान्वयनमा प्रदेशको सहयोग र भूमिका बारे छलफल तथा निर्णय गर्ने,
- समन्वय सम्वन्धमा देखा परेका समस्याहरू र समाधानका उपायहरू बारे छलफल तथा निर्णय गर्ने ।

संघीय कृषि तथा पशुपन्क्षी मन्त्रालयले नियमित रूपमा द्वैमासिक रूपमा समन्वय समितिको बैठक बसाउने तथा सो को लागि आवश्यक लजिस्टकको व्यवस्था गर्ने ।

प्रदेश र स्थानीय तह कृषि विकास समन्वय समिति

- कृषि विकास कार्यक्रम कार्यान्वयनको सन्दर्भमा प्रदेश र स्थानीय तह समन्वय कायम गराउन एक प्रदेश र स्थानीय तह कृषि विकास समन्वय समितिको गठन गर्नु आवश्यक देखिएको

प्रदेश र स्थानीय तह कृषि विकास समन्वय समितिको गठन

- प्रदेश सचिव, प्रादेशिक भूमी व्यवस्था, कृषि तथा सहकारी मन्त्रालय
- अध्यक्ष
- प्रदेश कृषि विकास निर्देशनालयका प्रमुख
- सदस्य
- प्रदेश अन्तर्गतका सबै कृषि ज्ञान केन्द्रका प्रमुखहरु
- सदस्य
- प्रदेश अन्तर्गतका गाउँपालिका/नगरपालिका कृषि विकास शाखा/कृषि सेवा केन्द्रका तर्फबाट प्रत्येक जिल्लाबाट जिल्ला समन्वय समितिको सिफारिशमा छनौट भएका एक जना कृषि विकास शाखा/कृषि सेवा केन्द्रका प्रमुख
- सदस्य
- बरिष्ठ कृषि अधिकृत प्रादेशिक भूमी व्यवस्था, कृषि तथा सहकारी मन्त्रालय
- सदस्य सचिव

प्रदेश र स्थानीय तह कृषि विकास समन्वय समितिको कार्यविवरण

- स्थानीय तहमा कार्यरत जनशक्तिको प्राविधिक र व्यवस्थापकिय क्षमता विकास सम्वन्धि कार्यक्रम पहिचान र कार्यान्वयनको व्यवस्था गर्ने,
- प्रादेशिक कृषि नीति तथा कार्यक्रम बारे जानकारी एवं कार्यान्वयनमा स्थानीय तहको सहयोग र भूमिका बारे छलफल तथा निर्णय गर्ने,
- समन्वय सम्वन्धमा देखा परेका समस्या तथा मुद्दाहरुको पहिचान गरि समाधानका उपायहरु बारे छलफल तथा निर्णय गर्ने ।

प्रदेश र स्थानीय तह कृषि विकास समन्वय समितिको बैठकको आयोजना प्रादेशिक भूमी व्यवस्था, कृषि तथा सहकारी मन्त्रालयले गर्ने । यस्तो बैठक प्रत्येक चौमासिकमा कम्तिमा एक पटक बस्ने व्यवस्था गर्ने ।

Strengthening Linkage between Research-Extension-Education

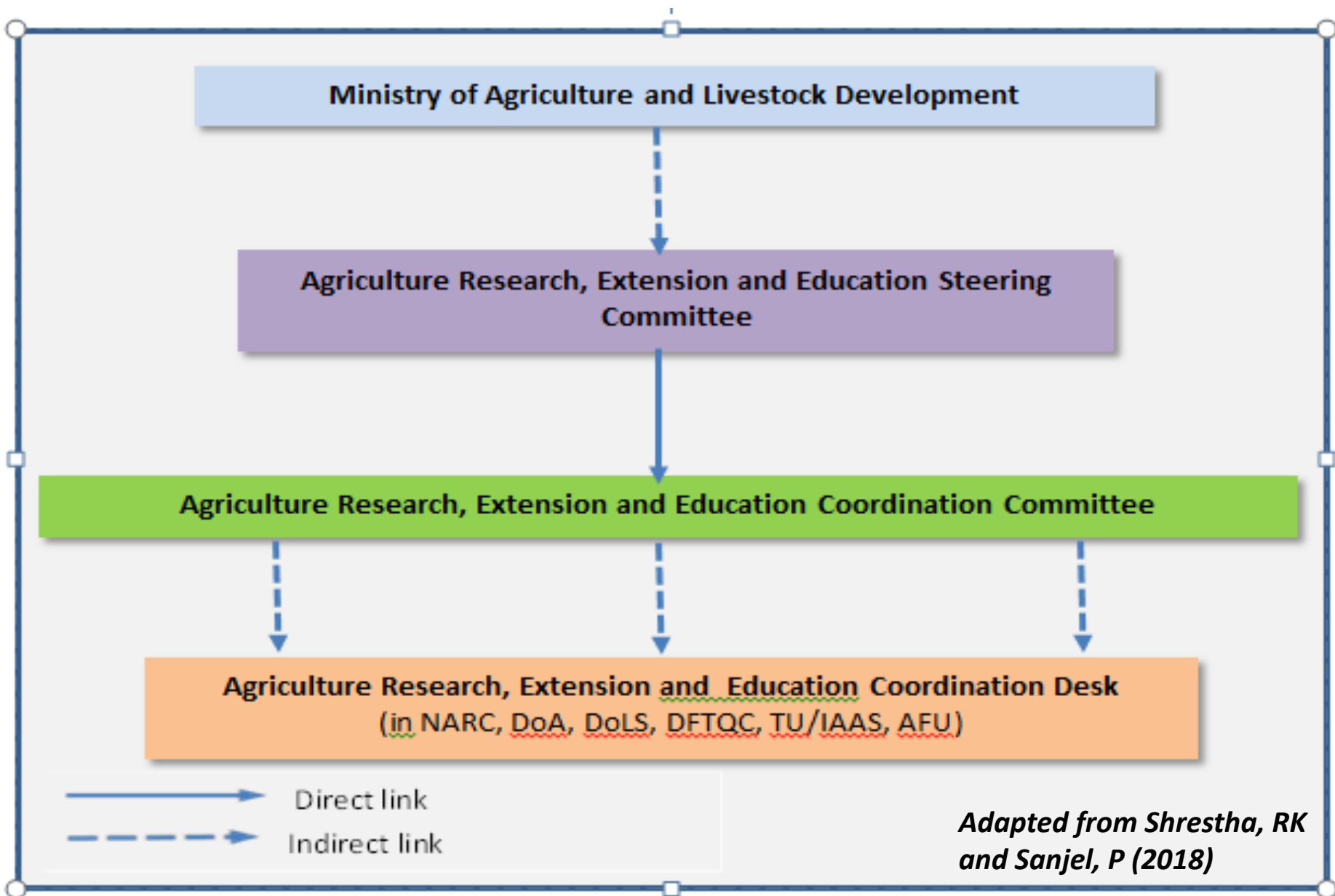
Strengthening agriculture research, extension and education linkage

- Strengthening linkage between agriculture research, extension and education has not received priority in policy and funding so far.
- R-E-E interface much talked about but poorly executed agenda
 - Only a few interface mechanisms
 - interface mechanisms-rather formal than functional
- strengthening agriculture research system not given due priority in national plans and policies barring the ADS

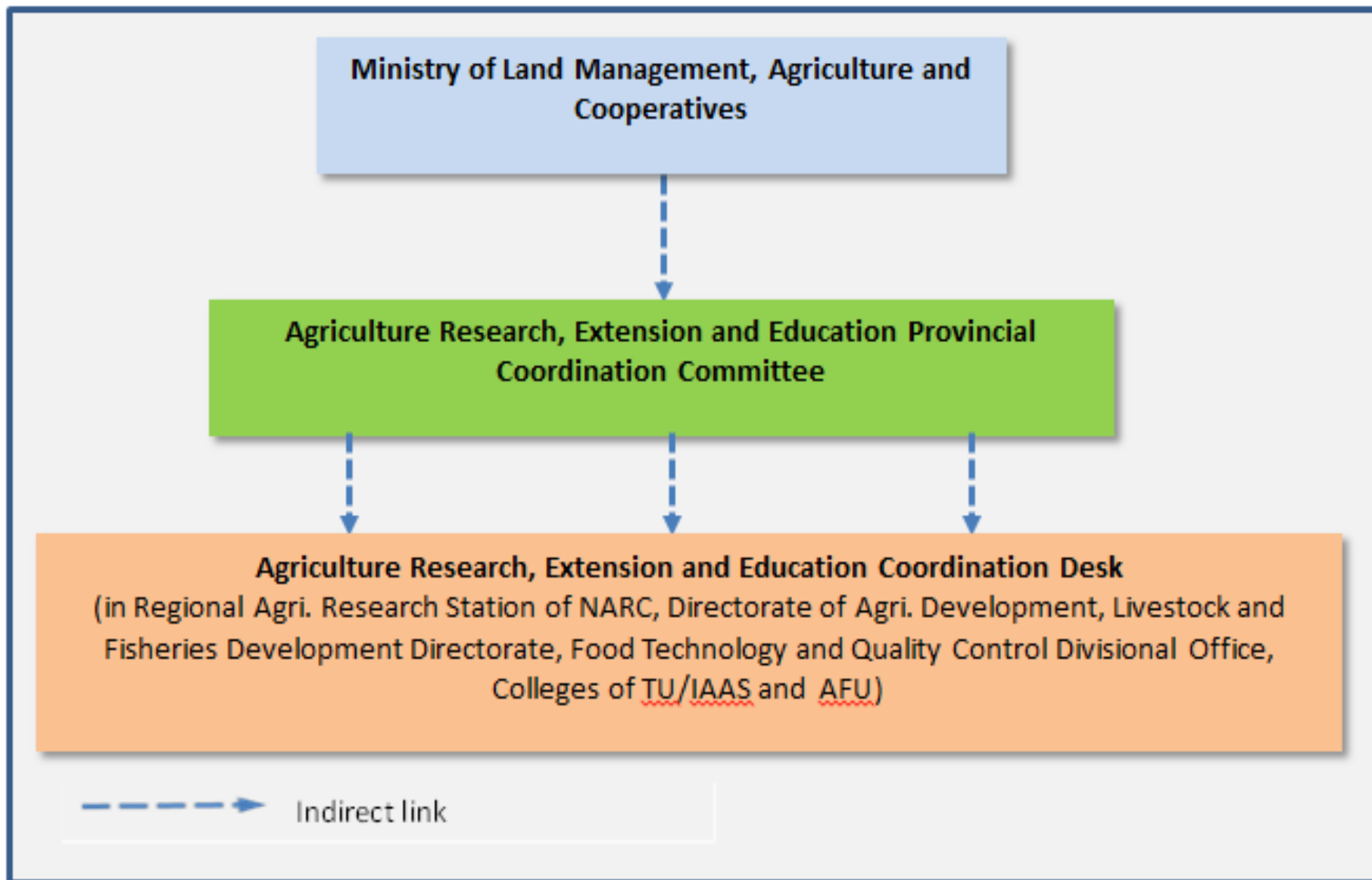
Strengthening agriculture research, extension and education linkage

- R-E-E linkage and coordination less emphasized in agricultural policies barring ADS
- There is a poor linkage between R-E-E institutions.
- There is no single window to govern and coordinate R-E-E functions.
- It is a high time that a strong linkage and interface mechanisms and arrangements are established at federal, provincial, sub-provincial and local levels.

Agriculture research, extension and education linkage mechanism at federal level



Agriculture research, extension and education linkage mechanism at provincial level



Agriculture research, extension and education linkage mechanism at sub-provincial level

- AKC could prove an important R-E-E interface platform at sub-provincial level.
- AKC joins hands with Agriculture Research Station (ARS) of NARC and agriculture colleges of TU/Institute of Agriculture and Animal Science (IAAS) and Agriculture and Forestry University (AFU) to
 - plan and implement interface activities including jointly identifying researchable problems,
 - joint planning and implementation of trials and demonstrations,
 - exchange programs,
 - internship programs, and so on.
- AKC as an outreach research site of Regional Agriculture Research Station (RARS)/Agriculture Research Station (ARS).
- utilizing the scientists and faculties for periodic training of frontline extension workers on promising technologies and research outcomes.

Agriculture research, extension and education linkage mechanism at local level

- Local levels are nearest to the farmers and agribusinesses, who are the ultimate users of the any technologies.
- A strong presence or engagement of R-E-E institutions with local level farmers will help develop and disseminate need based technologies.
- Some of the potential interface activities at local levels include
 - technology validation trials,
 - minikit distribution,
 - internship program,
 - regular joint field visit and interaction with farmers by R-E-E institutions, and
 - periodic training to local level extension staffs on promising technologies and research results.

- Agriculture sector is the only sector for the sustained economic growth and development of the country
- Development of agriculture sector also has a strategic importance for country's sovereignty and national security
- Present efforts and achievements are not sufficient to bring the country out of poverty and backwardness
- A strong commitment from all the corners is needed to change the fate of agriculture sector

Thank you