

# Influence of innovation platforms on information sharing and nurturing of smaller innovation platforms: A case study of the Tanzania Dairy Development Forum

*K.M. Kago, J.J. Cadilhon, M. Maina, A. Omore*  
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RESEARCH PROGRAM ON Livestock and Fish

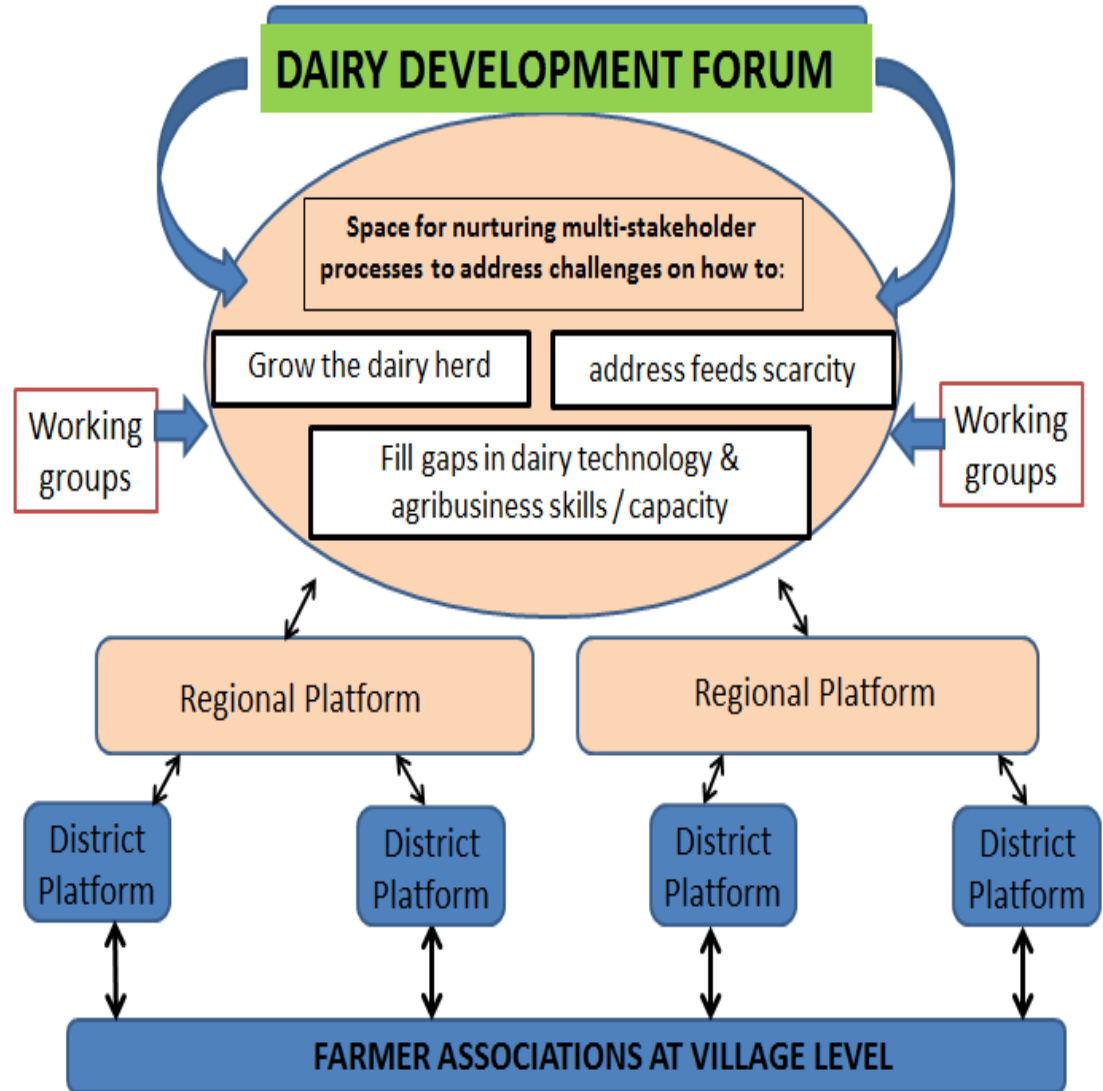


# Outline

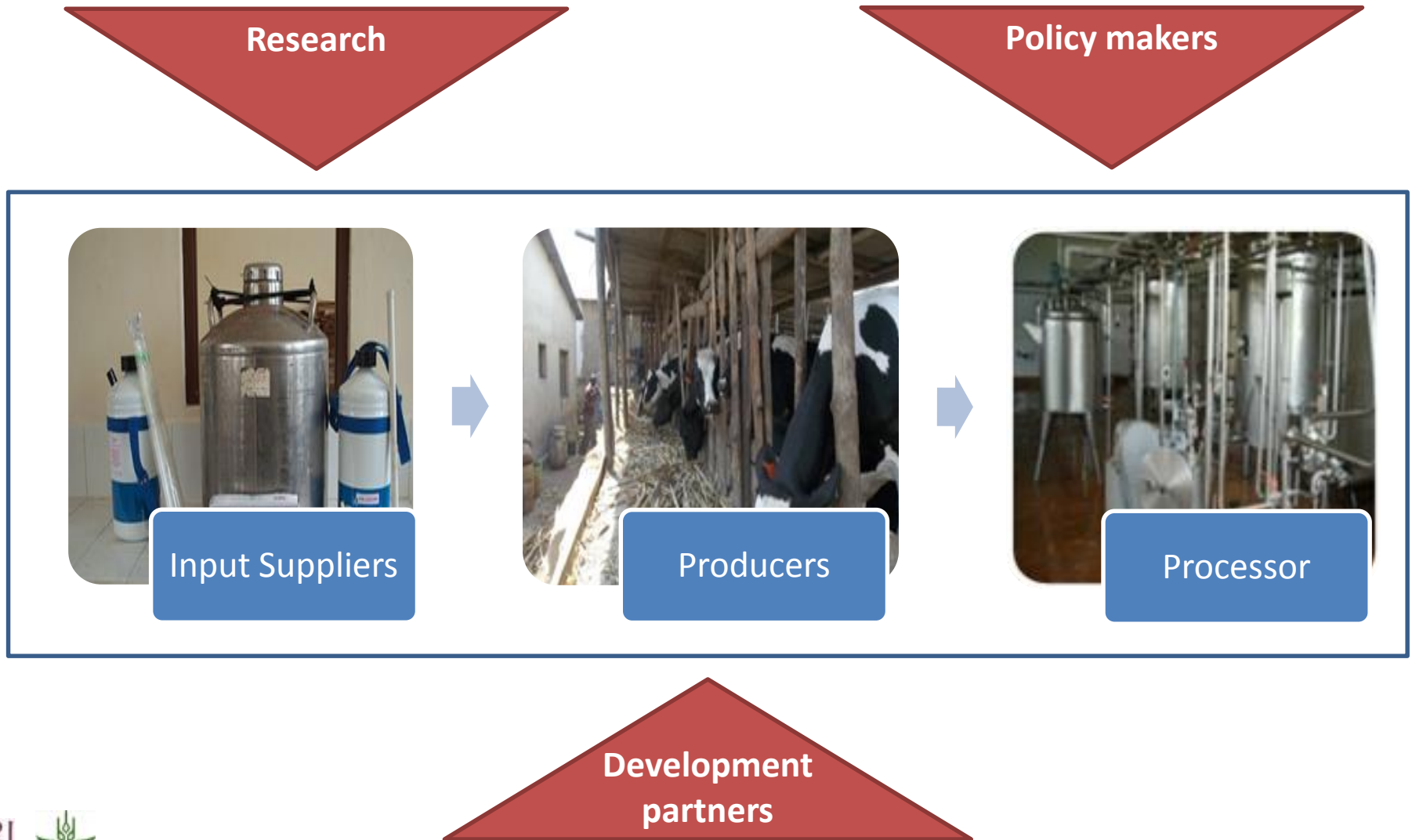
- ❑ Introduction: Dairy Development Forum
- ❑ Background and Purpose
- ❑ Literature Review
- ❑ Methodology
- ❑ Results and Discussions
- ❑ Conclusions
- ❑ Recommendations

# Introduction: Dairy Development Forum

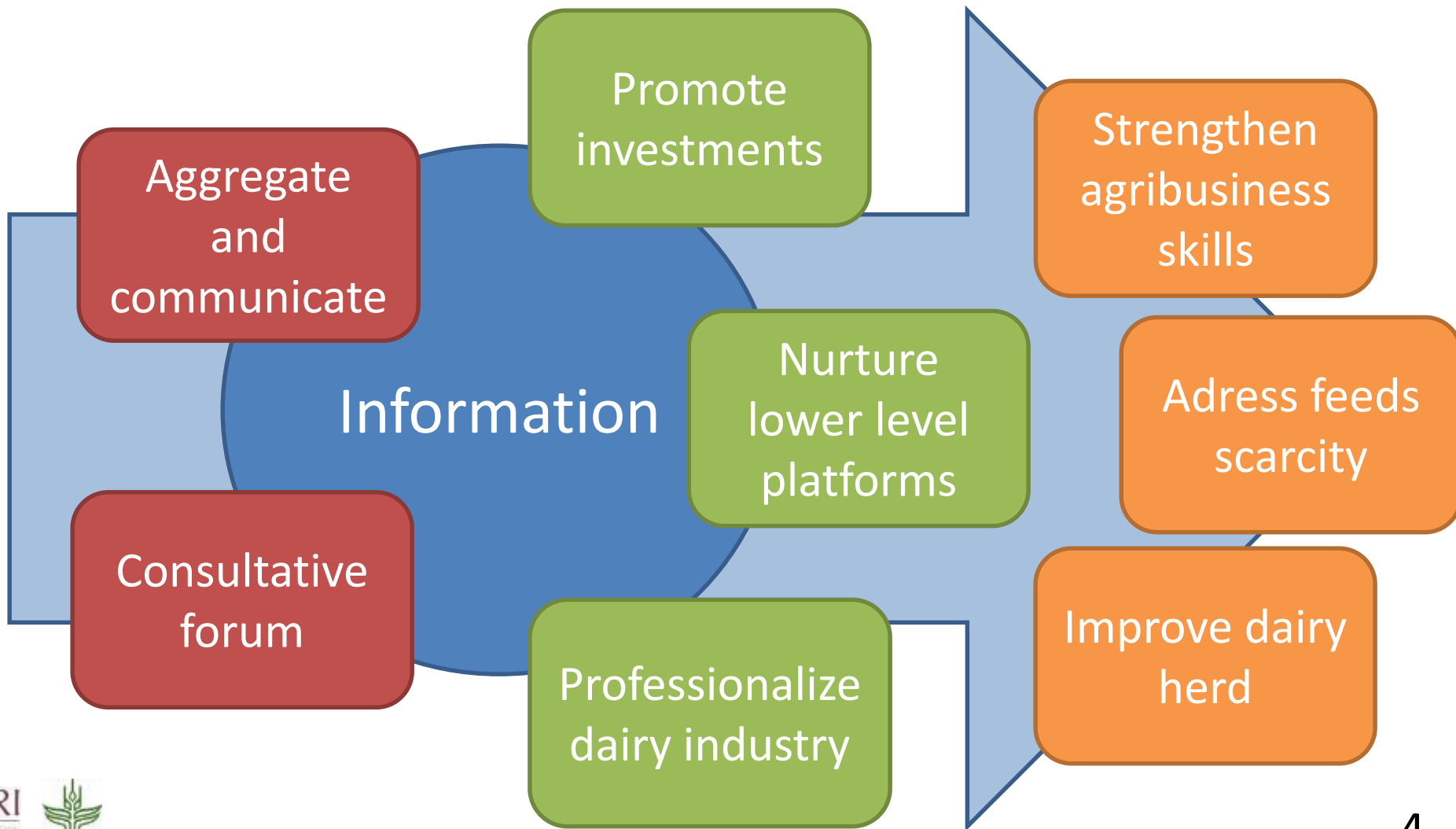
- ❑ Set up in Feb 2013
- ❑ Facilitates multi-stakeholder coordination



# DDF: Participants



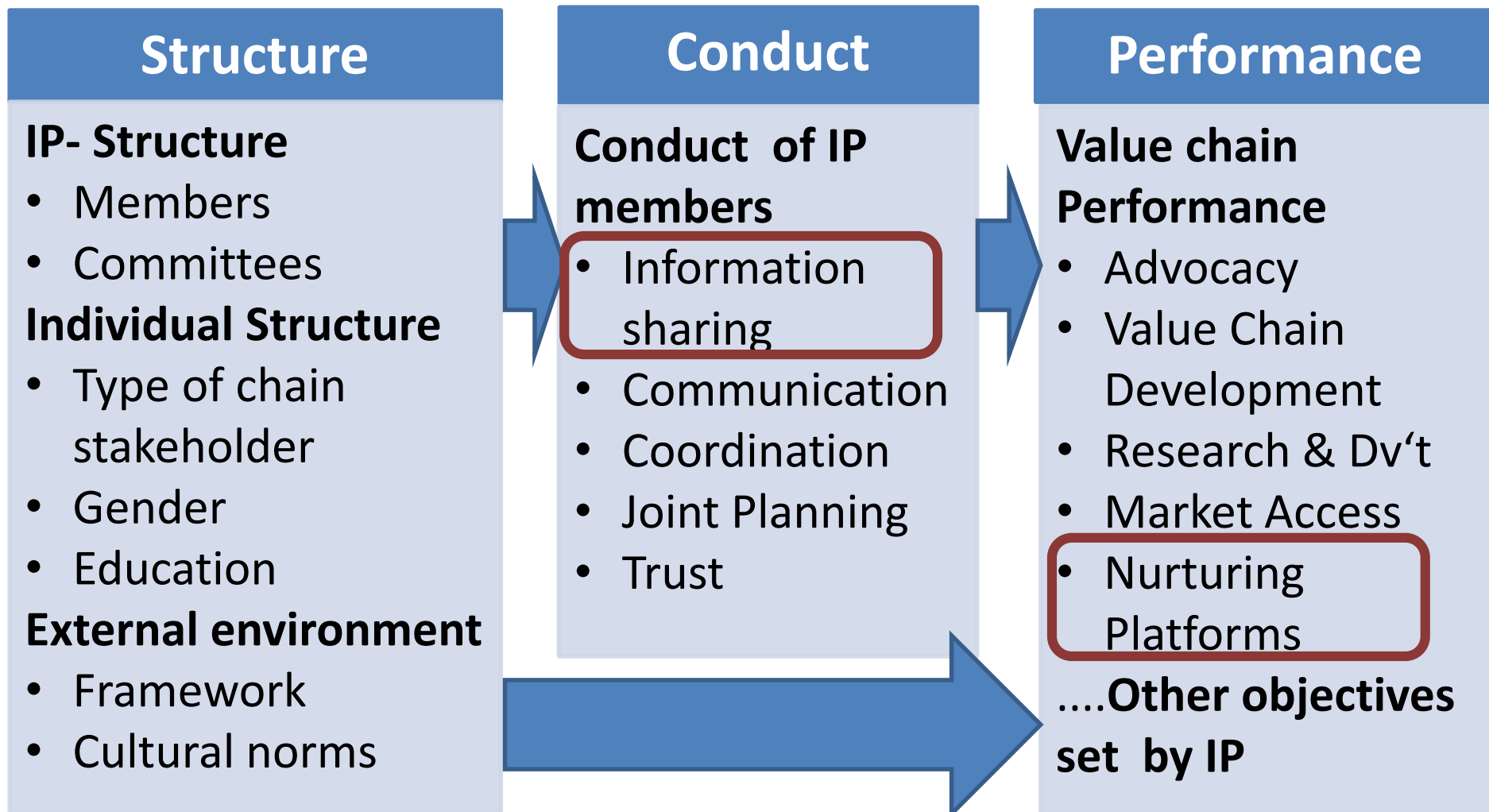
# DDF: Objectives



# Literature Review

- ❑ Innovation platforms: Equitable, dynamic space bringing actors together (Thiele, et al. 2011)
- ❑ Conceptual framework for impact evaluation of innovation platforms (Cadilhon, 2013)
- ❑ Institutional evolution: The theoretical level, The intermediate level, Empirical and policy level (Aoki, 2011)

# Conceptual Framework



# Definitions

- ❑ Information sharing – exchange of data and knowledge
  - ✓ Information asymmetry, high transaction costs, and increased risks along the value chain (Sun and Yen, 2005)
  
- ❑ Nurturing – supporting smaller innovation platforms to achieve their objectives
  - ✓ Establishment phase can be challenging when building consensus (Pali and Swaans, 2013)



# Research objectives

- ❑ Field Validation of Aoki's framework
- ❑ Testing and refining Cadilhon's conceptual framework for monitoring and evaluation of innovation platforms
- ❑ Breakdown of complex multi-stakeholder system data into simple categories: Structure, Conduct, Performance

# Methodology: Study area / Sites



# Methodology: Data Collection

Focus group discussion

6 discussions



Key informant interviews

5 Key informants



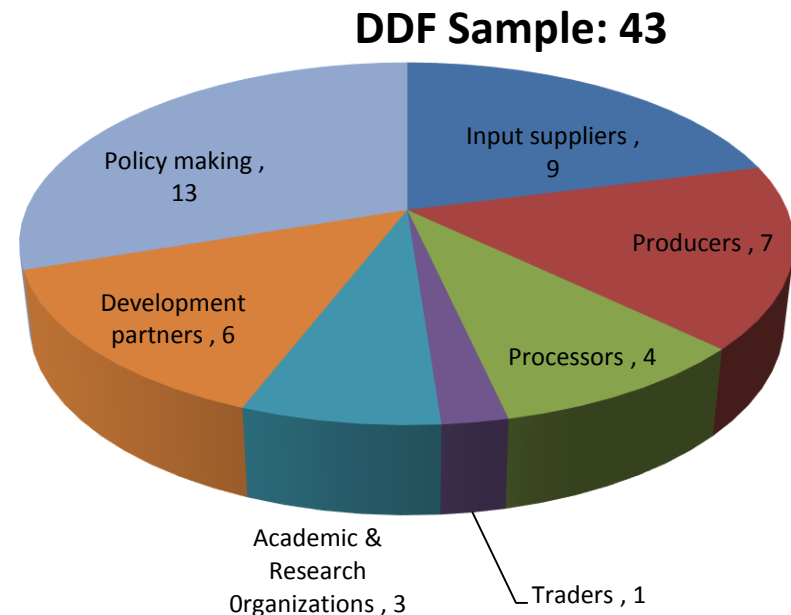
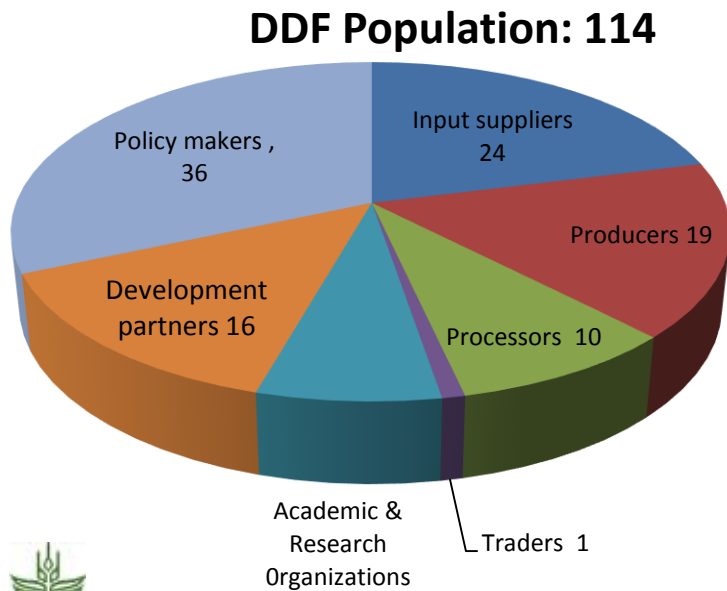
Individual Questionnaires

83 Individuals



# Methodology: Sampling

- ❑ Respondents: 41 DDF participants and 42 Non-participants
- ❑ A proportional stratified sample (by type of stakeholder) was drawn randomly from the DDF meeting participation lists
- ❑ Paired sampling was used for Non-DDF participants



# Methodology: Analysis

- ❑ Descriptive Statistics
- ❑ Factor Analysis
  - ✓ Data reduction tool
  - ✓ Group correlated variables
  - ✓ Form unrelated factors
- ❑ Regression
  - ✓ Least Square Method
- ❑ Qualitative data used for triangulation

# Methodology: Factor analysis

Factor Analysis	Cronbach's Alpha	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	Bartlett's Test of Sphericity	
			Chi-Square	Sig.
Conduct	0.792	0.671	229.342	.000
Performance	0.886	0.724	331.519	.000

- ❑ The Cronbach's Alpha test greater than the 0.7 suggests a reliable factor analysis
- ❑ KMO values above 0.6 prove sampling adequacy
- ❑ Bartlett's Test of Sphericity satisfied with significance less than 5%

# Factor Analysis: Nurturing regional Platforms

	Rotated Component Matrix <sup>a</sup>		
		1	2
<b>DDF Nurtures regional platforms</b>	7. DDF provides a platform for regional innovation platforms to learn from other successful examples of working IPs	.911	
	5. DDF assists to advocate concerns of regional innovation platforms at the national level	.874	
	8. DDF enables regional innovation platforms to expand their knowledge of dairy innovations.	.851	
	6. DDF encourages regional platforms to change their focus of discussion from time to time	.808	
	3. The DDF is involved in capacity development of members involved in managing working groups and taskforces	.392	
<b>DDF remains neutral in its interactions with regional platforms</b>	12. The DDF remains neutral in its interactions with the activities of working groups and taskforces to ensure they achieve their goals democratically		.806
	11. The DDF remains neutral in its interactions with the activities of regional IPs to ensure they achieve their goals democratically		.802

# Regression: Structure - Conduct

Dependent Variable: inf1. Dissemination of information to regional platforms and stakeholders by DDF					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-3.207	.942		-3.403	.002
Mem_1a Attendance in DDF meetings	.332	.159	.313	2.095	.047
Actor: input supplier	-.359	.461	-.162	-.780	.444
Actor: producer	.260	.584	.103	.445	.660
Actor: Development partner	.462	.847	.144	.546	.590
Actor: Academic / Research	-.008	.616	-.003	-.013	.990
Actor: Policy maker	-.136	.596	-.059	-.228	.822
Funding : operation generated	1.554	.888	.806	1.750	.093
Funding: Government Funded	1.993	.806	1.010	2.473	.021
Funding: Membership Fees	3.099	1.188	.849	2.609	.016
Organization: Government	.867	.526	.433	1.650	.113
Organization: NGO	1.591	1.200	.548	1.326	.198
Organization: Private	.494	.666	.242	.742	.466
Organization: Association	-1.035	1.042	-.323	-.993	.331
Regions: Dar es Salaam	.247	.464	.127	.532	.600
Regions: Tanga	.182	.478	.076	.381	.707
Regions: Others	-.788	.452	-.368	-1.745	.094
Gender: Male	.702	.355	.317	1.978	.060



# Regression: Conduct - Performance

**a. Dependent Variable: Nurtactor\_1 Nur1. DDF Nurtures regional platforms**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-4.748	1.665		-2.851	.007
Con1_3 3a. The information we get from the other platform partners/ organization is reliable.	1.769	.449	1.047	3.942	.000
Con2_2 5. We use contacts with other platform/ organization actors to get information relevant to our activities.	-.475	.240	-.292	-1.977	.055
Con2_3 6. We are satisfied with the communication frequency we have with other platform / organization members.	-.304	.160	-.284	-1.906	.064
Con5_1 13. We plan our activities together with our platform/ organization partners	.403	.142	.393	2.843	.007
Infosactor_1 inf1. Dissemination of information to regional platforms and stakeholders by DDF	.643	.138	.589	4.651	.000
Infosactor_2 Inf2. Quality and reliability of information disseminated by value chain actors	-.661	.274	-.583	-2.416	.020
Infosactor_3 Inf3. Information sharing between value chain actors	-.244	.160	-.237	-1.522	.136

$R^2 = 0.464$

Sig: 0.000 16

# Conclusion

- ❑ Cadilhon's (2013) conceptual framework is validated
  - ❑ DDF is influencing information sharing
  - ❑ Information sharing in DDF has some impact on nurturing regional dairy platforms
  - ❑ We can break down complex DDF system data into simple meaningful categories
  
- ❑ Aoki's framework is partly validated
  - ❑ Next stage in DDF pathway is influencing policy changes through advocacy

# Recommendations

- ❑ Encourage stakeholders still unrepresented to join DDF:  
Associations, some Government Departments
- ❑ Produce an information package after DDF meetings to  
disseminate to the dairy industry
- ❑ Continually improve information sharing by using knowledge  
sharing tools and methods

# Acknowledgements

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Box 30709, Nairobi 00100 Kenya  
Phone +254 20 422 3000  
Fax +254 20 4223001  
Email [ilri-kenya@cgiar.org](mailto:ilri-kenya@cgiar.org)

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# Annexes

# Factor Analysis: Information sharing

	Rotated Component Matrix <sup>a</sup>			
		1	2	3
Dissemination of information to regional platforms and stakeholders by DDF	8. DDF facilitates information sharing on establishment and management of regional innovation platforms	.940		
	7. The DDF facilitates flow of dairy industry information to regional innovation platforms	.905		
	6. We get enough information from DDF	.765		.349
Quality and reliability of information disseminated by value chain actors	2. The information we get from value chain partners is reliable		.929	
	3a. The information we get from the other platform partners/ organization is reliable.		.798	.335
	1. We are satisfied with the quality of information we get from value chain partners	.371	.729	
Information sharing between value chain actors	2a. The information we get from the other platform/ organization -partners is useful.			.908
	1a. We usually share information about our activities with other stakeholders.			.854



# Descriptive statistics: Structure

Variable	(Count or Mean)	
	DDF participants	DDF non-participants
Number of interviews	41	42
Men	31	31
Women	10	11
<b>Age*</b>	<b>51</b>	<b>46</b>
Completed primary school	0	3
Completed high school	0	6
Completed certificate	4	6
Completed university degree	13	17
Completed post-graduate degree	20	8
Completed PhD	3	2
Other education level	1	0

\*: Means are statistically significantly different at 5% level

# Descriptive statistics: Information sharing & Communication

Variable	(Count or Mean)	
	DDF participants	DDF non-participants
We usually share information about our activities with other stakeholders.	4.122	3.905
The information we get from the other platform/ organization - partners is useful.	4.024	3.881
The information we get from the other platform partners/ organization is reliable.	3.634	3.500
We attend periodic meetings of stakeholders to discuss common problems about our activities.	3.829	3.405
<b>We use contacts with other platform/ organization actors to get information relevant to our activities.*</b>	<b>3.927</b>	<b>3.500</b>
We are satisfied with the communication frequency we have with other platform / organization members.	2.829	2.643
<b>We can express our views freely in exchanges with our platform/ organization partners.*</b>	<b>4.122</b>	<b>3.738</b>

\*: Means are statistically significantly different at 5% level

# Descriptive statistics: Trust & Coordination

Variable	(Count or Mean)	
	DDF participants	DDF non-participants
Our trust on products/Services provided by platform / organization partners has increased in the past 2 years	3.585	3.429
We have greater trust in our partners if they are also part of a group (cultural, social, religious) we are part of.	3.390	3.357
We exchange information with our platform/ organization partners about our on-going activities.	3.878	3.524
<b>Our platform/ organization partners exchange information about their on-going activities with us.*</b>	<b>3.463</b>	<b>3.000</b>
We plan our activities according to the activities of our platform/ organization partners.	2.683	2.429
We plan our activities together with our platform/ organization partners	2.683	2.500
Our viewpoints are taken into account by our Platform / organization partners when they plan their activities.	3.268	3.024

\*: Means are statistically significantly different at 5% level

# Descriptive statistics: Joint planning & Information sharing

Variable	(Count or Mean)	
	DDF participants	DDF non-participants
Joint planning of activities with our platform/ organization partners has improved in the past 2 years.	2.902	2.762
We are satisfied with the quality of information we get from value chain partners	3.439	3.095
The information we get from value chain partners is reliable	3.683	3.476
We use the information shared with us in our activities	3.878	3.833
<b>We get too much information from DDF*</b>	<b>2.024</b>	<b>1.417</b>
Information on the market is easily accessible to value chain actors	3.050	2.690
<b>We get enough information from DDF*</b>	<b>2.341</b>	<b>1.417</b>

\*: Means are statistically significantly different at 5% level

# Descriptive statistics: Information sharing & Performance

Variable	(Count or Mean)	
	DDF participants	DDF non-participants
The DDF facilitates flow of dairy industry information to regional innovation platforms*	2.683	1.703
DDF facilitates information sharing on establishment and management of regional innovation platforms*	2.659	1.649
Representatives of the DDF facilitate innovation at the national level.*	3.780	2.917
Platform members communicate their achievement in other organized groups.*	3.366	2.538
The DDF lobbies for policy changes on national level.*	3.659	2.892
In the past 2 years, we have changed things (e.g. Practices, techniques) in our production, production process, or management.	3.750	3.650
In the past 2 years, we have gained knowledge and skills applicable in our activities from stakeholders outside DDF.	3.854	3.952

\*: Means are statistically significantly different at 5% level

# Descriptive statistics: Performance & Nurturing platforms

Variable	(Count or Mean)	
	DDF participants	DDF non-participants
In the past 2 years, we have gained knowledge and skills applicable in our activities from DDF stakeholders.*	3.805	1.800
In the past 2 years, we have improved our product.*	3.964	3.591
In the past 2 years, there has been an improvement in the Interaction between policies, Government, and other stakeholders.*	3.659	3.122
In the past 2 years, we have had a better access to the market.	3.519	3.308
The DDF has created regional platforms*	2.902	1.650
The DDF actively supports the work of other innovation platforms at provincial/ regional level.*	3.073	2.000
The DDF encourages us to form working groups within the platform to discuss specific problems.*	3.750	2.750

\*: Means are statistically significantly different at 5% level

# Descriptive statistics: Market performance

Variable	(Count or Mean)	
	DDF participants	DDF non-participants
Market access to inputs has improved in the past two years	3.343	3.571
Our access to output markets has improved in the past two years	3.938	3.590
We can now better negotiate market prices than two years ago	3.560	3.167
Our marketing skills have improved in the two years	3.800	3.615
<b>Our access to market information has improved in the past two years*</b>	<b>3.788</b>	<b>3.316</b>
Our income from dairy activities has improved in the past two years	3.783	3.520
We have created new products and services to respond to new market demands in the past two years	3.593	3.379

\*: Means are statistically significantly different at 5% level

# Descriptive statistics: Market performance & Nurturing platforms

Variable	(Count or Mean)	
	DDF participants	DDF non-participants
We have faced constraints in accessing markets in the past two years	3.593	3.541
Within the past two years, we have adhered to national or international quality or safety standards schemes	4.115	4.226
Our geographical location has an impact on our access to markets	3.542	3.440
<b>The DDF actively facilitates the establishment of regional innovation platforms*</b>	<b>2.707</b>	<b>1.825</b>
<b>The DDF is involved in capacity development of members involved in managing regional innovation platforms*</b>	<b>2.829</b>	<b>2.410</b>
The DDF is involved in capacity development of members involved in managing working groups and taskforces	3.024	3.000
<b>The DDF engages experienced advisors and consultants to guide regional innovation platforms in their development*</b>	<b>2.951</b>	<b>2.050</b>

\*: Means are statistically significantly different at 5% level



# Descriptive statistics: Nurturing platforms

Variable	(Count or Mean)	
	DDF participants	DDF non-participants
<b>DDF assists to advocate concerns of regional innovation platforms at the national level*</b>	3.268	2.744
DDF encourages regional platforms to change their focus of discussion from time to time	2.878	2.575
<b>DDF provides a platform for regional innovation platforms to learn from other successful examples of working IPs*</b>	3.317	2.775
<b>DDF enables regional innovation platforms to expand their knowledge of dairy innovations.*</b>	3.341	2.650
DDF guides working groups and task forces on solving funding challenges	2.659	2.966
<b>DDF guides regional innovation platforms on solving funding challenges*</b>	2.415	2.758
<b>The DDF remains neutral in its interactions with the activities of regional IPs to ensure they achieve their goals democratically*</b>	3.439	3.154
<b>The DDF remains neutral in its interactions with the activities of working groups and taskforces to ensure they achieve their goals democratically*</b>	3.415	3.000

\*: Means are statistically significantly different at 5% level