

**AGRICULTURE DEVELOPMENT STRATEGY (ADS)
JOINT SECTOR REVIEW (JSR)
FIRST ANNUAL REPORT
April 2019**

A. Background

1. Following the second JSR Technical Committee meeting on 3 December 2018, three members of the JSR core team (Chiefs of the Development Cooperation Coordination Section and ADS Coordination Section of MOALD and the JSR Coordinator) commenced review of the agriculture sector through consultations with selected central level stakeholders and exploration of secondary information. The purpose of the review was to (a) rapidly assess trends and progress of the agriculture sector against the ADS targets since its implementation in fiscal year (FY) 2016/17, (ii) examine associated operational and policy issues, including the challenges from the recent restructuring of the sector in line with the federal system of governance, and (iii) recommend possible measures in mitigating gaps and addressing issues and challenges in the sector.

B. Trends/Progress of Agriculture Sector against ADS Targets

2. ADS, having 10 years plan and 20 years vision, has numerical baseline, and vision component targets for the agriculture sector on **self-reliance, sustainability, competitiveness, inclusion, agriculture growth, livelihood, and food and nutrition security** for 5, 10 and 20 years (short, medium and long-terms, respectively). Implementation of ADS has completed two FYs and the third FY is underway. However, the review noted less consideration placed during annual programming on the 5-years targets, including in breaking these into annual targets, and monitoring accordingly, which made it difficult to collect information and properly report trends and progress of the sector. Nevertheless, it was found that investments have been taking place and annual outputs have been delivered around many indicators since implementation of ADS, even though these have been programmed, monitored and reported in conventional ways. Hence, attempts have been made in the following section to indicate trends towards the 5-year targets by drawing relevant data from various sources, including JSR estimates in some cases, for the last two FYs' and/or latest available information, of all 7 vision components and corresponding indicators, which are presented in Table 1, and briefly explained in subsequent paragraphs.

Table 1: ADS Targets Achievement Trends

Vision Component	Indicator	Baseline (FY2015/16)	Targets (FY2020/21)	Intermediary Achievement/Trend	Sources of Information
Self-Reliance	Food Grains Self-Sufficiency	16% food grains trade deficit	Reduce to zero deficit	Food grains trade deficit has not decreased. NRs79 billion imports and NRs11.43 billion exports registered from 16 July to 15 November 2018, with major share occupied by food grains. Cereals worth NRs44.58 billion imported in FY2017/18.	Dept. of Customs, Foreign Trade Statistics Dec 2018, and TEPC, Aug 2018
Sustainability	Year-round irrigated area (ha)	25.2% of cultivated land	35% cultivated land or 52,050 ha irrigated/year	41,180 ha irrigated area developed in FY2016/17 and 39,669 ha in FY2017/18. Irrigating additional 56,880 ha targeted for FY2019/20.	Ministry of Energy, Water Resource and Irrigation Records

Vision Component	Indicator	Baseline (FY2015/16)	Targets (FY2020/21)	Intermediary Achievement/Trend	Sources of Information
	Nutrient content in soil (%)	1.96	3	Could not find recent data in absence of annual monitoring system. Learned such data are collected for selected districts and can be accessed after processing and govt endorsement.	USAID-financed Nepal Seed and Fertilizer Project, 2019
	Degraded land (m ha)	3.72	2.88	Degraded land area decreased in recent years, although credible data not available. 15,460 ha degraded land restored in FY2017/18.	Ministry of Forest & Env. Records
	Forest coverage (%)	44.7	44.7	44.7% land is covered by forests and shrubs in FY2017/18.	Ministry of Forest & Env. Records
	Land productivity (AGDP/ha) (\$)	3,278	4,184	No evidence of agriculture land productivity increased during last two FYs.	Economic Survey, FY2017/18 (p 5, ex. summary)
	Agribusiness GDP contribution to overall GDP (%)	8	9	Agribusiness GDP perceived to have increased during last two FYs, given govt.'s high priority in agribusiness, although no mechanism to annually monitor progress.	JSR team estimate based on consultation with MOALD officials
Competitiveness	Agriculture trade balance (\$ m)	1,123	1,073	Ag. trade deficit widening in recent years.	TEPC FY2017/18
	Agricultural exports (\$ m)	225	456	Ag. export earnings increased to \$287 million in FY2017/18.	Computed from TEPC FY2017/18 data
Inclusiveness	Women or jointly owned agricultural land (%)	16	20	Women owned 19.7% of land in FY2017/18.	MOLMC&PA Records, FY2017/18
	Farmers' access to agricultural programs (%)	18.2	22	20% farmers accessed govt. extension services in FY2017/18.	MOALD Progress Report, FY2017/18
Agricultural growth	Average agri. GDP growth (%)	2.23	4	AGDP grew by 5.2% (at base price level) in FY2016/17 and 2.8% in FY2017/18.	Economic Survey, FY2017/18
Livelihood	Agri. GDP/labor (\$)	835	1,029	AGDP/labor is estimated to have increased to \$953.	JSR team's estimate based on Economic Survey FY2017/18 and Labor Survey 2008-2018 projections
	Rural poverty (%)	24.3	19	Rural poverty should have decreased alongside decreased national poverty (21.6% in FY2015/16), although no mechanism in place to annually monitor. Recent estimates to be available after NPC's review of 14 th plan progress completed. MPI indicates 33.2% rural poverty basing upon multiple indicators.	NPC, 14 th Plan (FY2016/17-FY2018/19). Multisector Poverty Index, FY2018
Food and Nutrition Security	Food-based poverty (%)	27.6	19	No information available on food-based poverty. 17.9% population is severely food insecure and undernourished.	Nepal Household Survey, 2017 Nepal Multisector Nutrition Plan 2017
	Nutrition • Stunting - below 5 year child (%)	37.4	29	Decreased to 35.8	World Hunger Report, 2018

Vision Component	Indicator	Baseline (FY2015/16)	Targets (FY2020/21)	Intermediary Achievement/Trend	Sources of Information
	<ul style="list-style-type: none"> Underweight - below 5 year child (%) Wasting - below 5 year child (%) BMI - women having 18.5 or less (%) 	30.1	20	Decreased to 27	
		11.3	5	Decreased to 9.7	
		18.1	15	Decreased to 16.5	

3. **Self-Reliance** (Component 1): Elimination of food grains trade deficit by FY2020/21 is the target for the **food grains self-sufficiency**, the only indicator under this component. Although there has been increase in food production in recent years, available agriculture trade data indicate deficit registering NRs79 billion imports and NRs11.43 billion exports during the first five months (16 July to 15 November 2018) of the ongoing FY2018/19, with major portion occupied by food grains; and NRs44.58 billion worth cereal imported in FY2017/18. People's changing food habits from traditional food grains to higher quality rice and food items mainly due to increased household incomes was reported as principal reason for the surge of food grains imports. Fluctuations in domestic food grains production due to varying rainfall conditions, lack of other inputs availability on time, and absence of information on food grains sold by farmers to traders who often export unofficially, were explained as other reasons for increasing food grains trade deficit and unavailability of correct trade data. Alignment of internal production with the changing food habits and restrictions of unofficial selling of domestic food grains may be needed to reduce food grains trade deficit.

4. **Sustainability** (Component 2): Under this component, the indicator for **irrigation development** is progressing positively with 41,180 ha irrigated area developed in FY2016/17 and 39,669 ha in FY2017/18, although the progress is behind the ADS target of developing 52,050 ha irrigated area annually. Development of additional 56,880 ha irrigated area is targeted for FY2018/19. Shortage of budget and slow progress in implementation of ongoing big and medium irrigation projects were reported as the main reasons for the shortfall. Progress on the **soil organic matter** indicator to increase to 3% by FY2020/21 from 1.96% baseline in FY2015/16 could not be obtained due to absence of annual or periodic monitoring mechanisms. However, it is interpreted that the recent organic initiatives in different parts of the country should have contributed to increasing organic content in soil. It was learned that such data has been collected and `being processed under the USAID-financed Nepal Seed and Fertilizer Project for selected districts, which can be accessed after the processing is completed and the Government endorsement is secured.

5. On the **degraded land** indicator, it is estimated that such land has not increased from the baseline of 3.72 million ha in FY2015/16, although there is no system established to monitor annual changes. Further, it was reported that 15,460 ha degraded land was restored in FY2017/18. Records on **forest coverage** indicator show that 44.7% land is covered by forest and shrubs, indicating no decrease in forest area compared to the baseline in FY2015/16 as stipulated by ADS. On the **land productivity** indicator, there is no evidence of increased agriculture productivity (AGDP/ha) from the baseline of \$3,278 in FY2015/16. Positive trend has been

observed against the **Agribusiness GDP** indicator target. The agribusiness GDP's share to the overall GDP is estimated to have increased to 8.5% in FY2017/18 from the baseline of 8% in FY2015/16. The Government's high priority in developing agribusinesses through its own resource and support from development partners (DPs) were explained as the main reasons.

6. **Competitiveness** (Component 3): Trends against the **agriculture trade balance** indicator target has not been encouraging as the agriculture trade deficit has been increasing in recent years, and the most recent data presented in paragraph 3 above indicate challenges in eliminating the agricultural trade deficit by FY2020/21. Progress under the **agricultural export** indicator target also exhibits challenges in achieving the annual export earnings of \$456 million by FY2020/21, as the export earnings increased to \$287 million in FY2017/18 from the baseline of \$255 in FY2015/16.

7. **Inclusiveness** (Component 4): Available data indicates that the target against the **land owned by women** indicator is progressing satisfactorily with 19.7% land owned by women by FY2017/18 compared to the baseline of 16% in FY2015/16, which indicates possibility of meeting the 20% targeted for FY2020/21. Access of government's **agriculture extension program** has increased to an estimated 20% farmers in FY2017/18 compared to the baseline of 18.2% in FY2015/16. This also indicates positive trend and possibility of reaching 22% farmers targeted by FY2020/21. However, given agriculture operations now fall under the jurisdiction of the provincial and local governments and they are confronted with shortage of technical staff, timely deployment of technical staff to these levels will be necessary to sustain the progress and achieve the target.

8. **AGDP Growth** (Component 5): Agriculture gross domestic product (AGDP) grew by 5.2% in FY2016/17 and 2.8% in FY2017/18 (at base price). These figures indicate positive trend for achieving the 4% growth targeted for FY2020/21, although this would be contingent upon favorable weather conditions, timely availability of inputs and enabling policy environment in the sector.

9. **Livelihood** (Component 6): Although there is no mechanism to annually monitor target for the **agricultural labor productivity** indicator in terms of AGDP per labor, estimates from the available data indicates labor productivity has increased to \$877 in FY2016/17 and \$953 in FY2017/18 from the baseline of \$835 in FY2015/16, which indicates possibility of meeting \$1,029 targeted by FY2020/21. A significant increase in agricultural wage has occurred in recent years due to shortage of laborers as a result of many productive youths leaving the country for remittances every year. There is no mechanism for annual monitoring of **rural poverty** indicator too. However, it is assumed that rural poverty should have decreased during the last two years along with the decrease in the national poverty (21.6% in FY2015/16 according to the 14th Plan), albite in a slower rate, as rural poverty has always been higher than national poverty. The Plan targets to reduce the overall poverty to 17% by FY2018/19. Hence, it can be expected that the rural poverty would also decrease even if at a slightly lower rate compared to the overall poverty. This information should be available soon as outputs of the 14th Plan is being assessed by NPC as a basis for preparation of the 15th Plan. However, the Multisector Poverty Indicators published by NPC indicates rural poverty at 33.2% in 2018, although it has considered several indicators related to health, education and living standard.

10. **Food and Nutrition Security** (Component 7): There is no mechanism for annually assessing progress on **food-based poverty** indicator. However, available information indicates that 17.9% of the population is severely food insecure and malnourished in FY2017/18, which provides basis to assume that the food-based poverty should have decreased from the baseline of 27.6% in FY2015/16. The reduction is mainly attributed to the increasing remittances. Hence, there is a need to establish annual progress monitoring mechanism against this indicator to ascertain if the food-based poverty is moving towards achieving the 19% target by FY2020/21. Although there is no mechanism for annual monitoring of **stunting**, FY2017/18 data shows it has decreased to 35.8% from 37.4% baseline in FY2015/16, which indicates decreasing to 29% by 2020/21 will need further coordinated efforts. Meeting the target for **underweight** indicator of 20% by FY2020/21 from the baseline of 30.1% in FY2015/16 also seems challenging as the progress by FY2017/18 is 27%. Like some other indicators, there is no mechanism to annually monitor and publish progress on underweight, which may make it difficult to assess trends towards achieving the targets.

11. Available information shows that progress against the **wasting** indicator target is also moving slowly. Wasting decreased to 9.7% in FY2017/18 from the baseline of 11.3% in FY2015/16. This indicates that the ADS target of reducing wasting to 5% by FY2020/21 may also be challenging. Further, there is a need to establish annual monitoring mechanism to assess trends in meeting the five-yearly target. Progress on women with 18.5 or less **body mass index** (BMI) indicator target seems moving positively as women with the above BMI threshold has decreased to 16.5% in FY2017/18 from the baseline of 18.1% in FY2015/16, showing possibility of achieving the 15% BMI targeted by FY2020/21. However, like with other indicators, there is a need to establish annual BMI monitoring mechanism to learn further progress and ascertain the target is met by FY2020/21.

12. **Rural Connectivity:**¹ Although rural road development is not a core indicator of ADS, the review team attempted to obtain progress, given rural roads play important roles for agriculture commercialization and marketing. ADS targets 3,750 km rural road developed per year (50 km/district). In FY2016/17, 5,586 km rural roads were developed (new construction 1,913 km; maintenance 3,556 km and rehabilitation 117 km), almost 50% higher than the ADS target. A total of 2,194 km rural roads (new construction 194 km; maintenance 2,000 km) were developed in FY2017/18, which is about 33% less than the target. The target for the FY2018/19 is 2,549 km (new construction 524 km; rehabilitation 25 km; and maintenance 2,000), which is 32% less than the ADS target. Shortage of fund was the principal reason indicated for the shortfalls (Source: MOFAGA, DOI Records).

13. **Dairy Products, Technician Deployment and Policy Reforms:** The JSR team also assessed progress on (i) increase in **total value of processed dairy products**, (ii) **deployment of agriculture technicians to local level** and (iii) **status on land management and agribusinesses policy reforms** during FY2017/18. Separate progress assessment in the above three areas is intended to demonstrate compliance status for release of first tranche budget support under the EU-financed "Contribution to Agriculture and Rural Development (CARD) in Nepal". It was found that the total value of the processed dairy products increased to NRs27.1

¹ Given important roles rural roads play in agriculture commercialization and agribusiness development (and has annually broken-down target in ADS), progress on rural roads has been include although there is no indicator target for rural connectivity in ADS.

billion in FY2017/18 from NRs21.1 billion in FY2016/17 (Sources: NDDDB and DDC Records), which exceeds the targeted NRs25.6 billion for FY2017/18. MOALD approved 2,242 agriculture technician positions and recruited and deployed 994 technicians to local level by FY2017/18, exceeding the targeted deployment of 737 technicians (Source: MOALD Administrative Record). Land use legislation has been approved by MOLMC&PA Secretary and submitted for the Parliament's consideration in 2018 (Source: MOLMC&PA Records). The agribusiness promotion legislation, covering agribusiness promotion and market management, is at final stage of the MOALD Secretary's approval for submission to the Parliament (Source: MOALD Record). Progress of the other three CARD indicators (also for release of the first tranche budget support) relating to (i) year-round irrigated area development, (ii) stunting of children below five years age and (iii) increase in land owned by women (three of 16 core indicators of ADS) are covered in Table 1 and explained in relevant paragraphs.

C. Findings and Recommendations

14. **Findings:** (i) The consultative review found less consideration placed on ADS action plan, indicators and targets for annual programming, monitoring and reporting of the agriculture sector and the associated sub-sectors. As a result, tracking of trend and/or intermediate progress against sector targets became difficult. (ii) Importance of the ADS Coordination Section (ADSCS) and its role in supporting programming and coordination within and outside the Ministry remained in shadow during combining and separating the Ministry and accordingly adjusting its scope. (iii) Although the ADSCS reemerged after the Ministry was formed in the current shape and subsequently restructured in June 2018, its TOR in liaising and coordinating within and outside the Ministry and functioning as focal section on ADS is yet to be clarified.

15 **Recommendations:** (i) Preparation of ADS implementation plan with annual and five-yearly investment and output indicators and targets and monitoring and reporting mechanisms needs to be developed, officially endorsed and implementation started from FY2019/20. This will also fit into the schedule of the forthcoming 15th Plan (FY2019/20 to FY2023/24) preparation and contribute to fixing priorities and targets for the agriculture sector in the Plan. Setting and monitoring of annual targets will allow to assess annual progress and trends and apply mid-course corrections for achieving five-yearly targets. (ii) Provincial and local governments are not sufficiently familiar with the thrust, content and relevance of ADS in their context. However, provinces are willing to prepare their agricultural development plan aligning with, and within the broader framework, of ADS. Therefore, the ADS orientation planned for provinces needs to be completed with high priority by clearly showing the provinces' potentials/resource endowment and linking with ADS. ADS orientation for all provinces is programmed and budgeted by MOALD for the current FY2018/19. Subsequently, provinces could be supported to prepare their agriculture development plan in coordination with MOALD for which DPs have shown interest. (iii) Currently, functional linkages and information flow mechanisms are uncertain among federal, provincial and local governments. This may pose difficulties in implementing ADS at three levels and periodically monitor and report the sector progress at national level. Hence, mechanisms need to be established for linkages and information flow and endorsed at all three levels. The three-tire linkage study being conducted jointly by MOALD and Knowledge-based Integrated Sustainable Agriculture in Nepal (KISAN) II Project could fill the gap if recommended mechanisms are agreeable. (iv) Role of ADSCS needs to be clarified by formally issuing TOR to function as focal section, coordinate within and outside the Ministry in sector programming and monitoring,

maintain database, and prepare progress reports. (v) Capacity of ADSCS and related sections/focal persons within the ministry and departments needs to be strengthened to effectively carry out ADS/sector related tasks, including by identifying other areas of capacity constraints. This could be started by utilizing the technical assistance under EU CARD and continued by combining resources from the Government and other DPs.