



Kingdom of Cambodia



Ministry of Agriculture,
Forestry and Fisheries



GREEN
CLIMATE
FUND

CLIMATE-FRIENDLY AGRIBUSINESS VALUE CHAINS SECTOR PROJECT (CFAVC)



ANNUAL WORK PLAN AND BUDGET 2020

ADB Loan No. 3661-CAM (COL)/8346-CAM (EF)
Grant No. 0579-CAM (EF)

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1 EXECUTIVE SUMMARY

1.1 General

The CFAVC project is implemented in four provinces, 2 in the northern SGM corridor in Kampong Cham and Tbong Khmum provinces and 2 in the Southern Coast economic corridor in Takeo and Kampot provinces. This 2020 Work Plan and Budget (AWPB 2020) describes in detail the activities of the project in 2020 and provides an updated procurement plan and budget plan per implementing agency and per loan/grant source.

1.2 Costs and Financing

The **AWPB 2020** amounts to \$ **15,416,340**, which is some **10.93 %** of the total loan and grant amount of \$141.04 million, comprising of (i) a concessional loan No 3661/CAM of \$90 million from ADB's ordinary capital resources, (ii) a loan No. 8346-CAM (EF) of \$10 million and (iii) a Grant No 0579-CAM (EF) of \$30 million from the Green Climate Fund (GCF). The RGC will contribute \$ 7.38 million) and the Beneficiaries \$ 3,66 million.

The ADB loan and ADB-administered loan and grant proceeds will finance (i) civil works; (ii) equipment and materials; (iii) studies, surveys and design; (iv) training and demonstration; (v) policies and standards; (vi) monitoring and evaluation; (vii) consulting services; (viii) information and communication technology; and (ix) incremental operating costs. Tables 4 and 6 provide in PAM, for the 3 sources the content and financing percentages. ADB and GCF will finance taxes and duties for civil works, trainings and portion of incremental operating cost.

The government contribution in the equivalent of \$7.38 million to (i) finance biogas plants and composts huts; (i) pay salaries of government staff working for the project; (iii) cover cost of land acquisition and resettlement; (iv) monitor (including external monitoring for safeguards and external audit), and (v) pay taxes and duties for goods, equipment, materials, surveys and services through exemption. Contribution from the beneficiaries of \$3.66 million equivalent can be in-kind or in cash for the biogas plant, and compost huts.

1.3 Value-Chain Concept

The essence of a value-chain project is both the processes of crop-production and that of the post-harvest/processing in one regional area are improved. With the improvement of irrigation facilities, rural road accessibilities, agricultural processing and storage, improved processing of agriculture waste into bio-energy, improved access to markets and the promotion of equal opportunities for work and livelihood options for male and female farmers, a situation is created in which farmers can more fully participate in, and benefit from project interventions, and make sufficient profit to raise their families income.

Road connectivity is a key factor affecting competitiveness of agricultural value chains, one of the key outputs of the project is improving the connectivity of (i) farms to agriculture cooperatives and (ii) markets through climate- resilient farm road networks.



Therefore, the second component of the assignment is to assess the feasibility of suitable farm and market roads that will facilitate transportation of agricultural inputs from market to agriculture cooperatives and farms as well as transportation of agricultural produce from farms to cooperatives and markets. The Consultant will carry out the following activities to determine the feasibility of farm and market road subprojects ensuring that the subprojects are technically, environmentally, socially and economically feasible. Specific farm and market roads of prospective subprojects received from after interaction with MRD, are the roads, located and

linked to irrigation subprojects, that will be studied for rehabilitation/ improvement. Table 1 shows in simple manner the combined crop-production and post-harvest phases and how the CFAVC project will intervene to smoothen and facilitate the process.

Table 1: CFAVC Interventions during Value Chains Process

Activity		1	2	3	4	5
		Pre-plant	Crop-growth	Harvest	Storage and Processing	Marketing
On-Farm	Inputs	New varieties	Drip Irrigation			
	Training/ Institutional		Good Farming practices/ Contract-farming/ Climate-risk screening/ Organic fertilizer standards/Green finance			
Water	Civil works		Irrigation and Drainage infrastructure			
	Training/ Institutional		FWUC empowerment			
Off-farm	Civil Works/ Equipment		Bio-digesters Compost huts	BSD roads	Agriculture Cooperatives Engineering Workshops	Concrete roads
	Training/ Institutional				Farm product certification	PPP initiatives
Enabling Environment	Policy, green finance, PPP	Enabling environment for all stages of the value chain				

At the time of the drafting of this report for all project activities, it was not clear which IAs will be responsible for the implementation of the rainwater-harvesting ponds and the drip irrigation systems. This can be either the PIU of MAFF of the PIU of MoWRAM.

2 PROJECT OUTCOME and IMPACT

2.1 Overall objective

The **Impact** of the Project will be the improvement of agricultural competitiveness, which will be reflected in enhanced productivity, climate resilience capacities, quality and safety of products, value addition, and rural household incomes.

The **Outcome** of the Project will be the development of resource-efficient and gender responsive agribusiness value chains in the Project area¹.

2.2 Outputs

The three outputs of the project are listed below.

Output 1: Critical agribusiness value chain infrastructure improved and made climate resilient.

This output bridges gaps in infrastructure to enhance the competitiveness of the value chains of rice, maize, cassava, and mango in target provinces. It involves rehabilitation and modernization of rural infrastructure to increase production and resource efficiency, reduce postharvest losses,

¹ The design and monitoring framework (DMF) is shown in Table 2 and Gender Mainstreaming Action Plan in Annex X

and enhance quality and value chain links while reducing green-house gas (GHG) emissions and increasing climate resilience. Under this output, 5 main activities will be implemented.

Key activities involve:

- 1) Rehabilitation irrigation and water management infrastructure (off-farm irrigation systems, on-farm water rainwater harvesting ponds, and drip irrigation) to climate-resilient condition;
- 2) Upgrading agricultural cooperatives' value chain infrastructure (drying, processing and storage facilities);
- 3) Improving the connectivity of farms to cooperatives and markets through climate-resilient farm road networks;
- 4) Strengthening the infrastructure for agricultural quality and safety testing; and
- 5) Promoting renewable energy (bio-digesters, use of solar energy in target cooperative).

Output 2: Climate-smart gender responsive agriculture and agribusiness promoted.

Under this output a total of 4 activities will be implemented:

- 1) The project will support the Cambodian Agricultural Research and Development Institute to produce, multiply, and distribute climate-resilient varieties of rice and maize and to improve weaning and acclimatization of mango and cassava.
- 2) The project will train at least 40,000 farmers (of which 16,000 are women) on CSA practices, demonstrate laser land levelling, and construct and upgrade four farm mechanization workshops and four agribusiness training facilities
- 3) For each gravity irrigation scheme developed Operation and Maintenance capabilities will be established and strengthened.
- 4) In the participating provinces agricultural development centers and engineering workshops will be made fully operational

Output 3: Enabling environment for climate-friendly gender responsive agribusiness enhanced.

Under this Output a total of 6 activities will be implemented:

- 1) The project will support the Ministry of Agriculture, Forestry, and Fisheries (MAFF) and the Ministry of Commerce in creating a favorable gender responsive policy environment for agribusiness as well as mobilizing private sector participation through public-private partnerships (PPPs) and contract farming.
- 2) The project will provide support for farm product certification, quality standards, and resilience capacities
- 3) Good agricultural practice and organic fertilizer and biofertilizer standards.
- 4) The project will support cooperatives in becoming sustainable agribusiness ventures by linking up with the private sector and by establishing crop-centric PPP forums.
- 5) The project will raise financial institutions' awareness on green finance and the integration of environmental and climate risk screening criteria into credit application and reporting procedures.
- 6) Using information and communications technology (ICT), the project will provide weather forecasting, market, and agronomic information to create an environment for more effective climate related risk/hazards management.

3 SUMMARY OF PROGRESS DURING 2019

3.1 Institutional Arrangements

The institutional units of the project implementation consisted of project steering committee (PSC), project management unit (PMU), project implementation unit (PIUs) and the provincial project implementation unit (PPIU).

At the national level the Ministry of Agriculture, Forestry and Fisheries (MAFF) is the Executive Agency (EA), and works in close coordination with MoWRAM, and MRD. There is a total of 5 implementing agencies with a PIU, 3 at MAFF (the General Directorate of Agriculture (GDA),

CARDI and GDAHP), 1 at the General Directorate of Technical Affairs of MoWRAM, and the fifth one at the General Directorate of Technical Affairs of MRD.

At the provincial level, the provincial project implementation unit (PPIU) have been created by all 5 Implementing agencies.

3.2 Consulting Services Recruitment

In 2019, 3 out of the total 6 consulting services contracts were signed as shown in Table 2 below:

Table 2: CFAVC Consulting Services Awards 2019

Package Number	General Description	Actual Contract Amount	Procurement Method	Contract Date	Comments
CS1	Project Implementation Consultant (PIC)	4,158,200	QCBS	25 Jul 2019	Agriconsulting Europe SA (AESAs) (Belguim) in association with SBK Research and Development Co., Ltd (Cambodia) (PCSS 0003)
CS2	Capacity Building and Climate Smart Agriculture Consulting Firm	3,265,076	QCBS	12 Jul 2019	E.Gen Consultants Ltd. in association with SBK Research and Development Co. Ltd., Okapi Environment Consulting and International Center for Tropical Agriculture (PCSS 0004)
CS5	Feasibility studies & Detailed engineering design consulting firm (for irrigation and rural roads)	2,313,414	QCBS	26 Sep 2019	Resources Development Consultants (PVT) Ltd. (Sri Lanka) in association with (PCS 0005)

3.3 PMU Procurement

Table 3 shows the progress of procurement plan in 2019

Table 3: CFAVC 2019 Other Procurement

Package Number	General Description	Actual Contract Amount	Procurement Method	Contract Date	Comments
G6	Motorcycles, 47 units	78,114	Shopping	23 Jan 2019	O.M.C. Co., Ltd (PCSS 0001)
G5	Pick-up Vehicles, 15 units	419,250	NCB	27 Feb 2019	HGB Auto Co., Ltd (PCSS 0002)
G12	Office appliance	11,260	Shopping/ RFQ	15 Nov 2019	Mongkul Bee Co., Ltd. (PCSS 0007)
G13	Vehicles (pick-ups trucks, 5 units)	\$ 137,500	NCB	7 Feb 2020	RMA (Cambodia) Co., Ltd Still awaiting ADB issuance of the PCSS
CW20	Installation of office partition	3,244.60	Shopping	13 Nov 2019	Veng Srun
G10	Office equipment (2 lots)	123,447	NCB	25 Dec 2019	ICE Electronics Co., Ltd Still awaiting the ADB issuance of the PCSS
G11	Office furniture	61,731	Shopping	18 Dec 2019	Office Furniture Solutions Co., Ltd. Still awaiting the ADB issuance of the PCSS

3.4 Disbursement

At 31 December 2019 a total of \$ 2,722,218 had been disbursed, equivalent to 2.38 % of the combined loan and grant amount of \$ 130,000,000. The \$ 2,722,218 comprised of \$ 1,248,000 initial deposit (to the 2 loans) and \$ 1,474,218.77 actual disbursements, all from the 3661-loan. There have been no payments yet from the grant. For more details reference is made to Tables 4 – 6, which also provide the details of the composition of these 3 fund sources.

Table 4: Disbursement of ADB Loan No 3661-CAM

No.	Activity	Amount (\$)	Disbursed per 31-12-19			
			MAFF	MOWRAM	MRD	TOTAL
1	Civil Works					
1A	Irrigation and Roads	60,537,190	0	0	0	0
1B	Warehouses and Laboratory	5,762,800	0	0	0	0
1C	Other Infrastructure	1,330,600	0	0	0	0
2	Equipment, Materials, Goods, and Project Implementation Services	16,757,700	1,463,737.8	0	0	1,463,737.8
3	Incremental operating cost	4,187,100	0	0	0	0
4	Interest Charges	1,424,610	0	0	0	0
Initial Deposit			360,000	448,000	100,000	908,000
Total		90,000,000	1,834,218.77	448,999	100,000	2,382,218.77

Table 5: Disbursement of GCF Loan No. 8346-CAM (EF)

No.	Activity	Amount (\$)	Disbursed per 31-12-19			
			MAFF	MOWRAM	MRD	TOTAL
1	Civil Works	9,963,900	0	0	0	0
1A	Irrigation and Roads	36,100	0	0	0	0
Initial Deposit			0	0	0	0
Total		10,000,000	0	0	0	0

Table 6: Disbursement of GCF Grant No. 0579-CAM (EF)

No.	Activity	Amount (\$)	Disbursed per 31-12-19			
			MAFF	MOWRAM	MRD	TOTAL
1	Civil Works					
1A	Irrigation and Roads	8,295,660	0	0	0	0
1B	Warehouses and Laboratory	114,950	0	0	0	0
1C	Bio gas and Compost Huts	2,854,150	0	0	0	0
2	Equipment, Materials, Goods, and Project Implementation Services	10,785,430	0	0	0	0
3	Incremental operating cost	7,456,780	0	0	0	0
4	Interest Charges	493,930	0	0	0	0
Initial Deposit			340,000	0	0	340,000
Total		30,000,000	340,000	0	0	340,000

4 CONSOLIDATED BUDGET AWP 2020

4.1 Overall

The overall 2020 budget amounts to \$ **15,416,340**. Table 7 shown the AWPB 2020 per DMF outputs with a total of \$ **12,543,650** and for operational expenses and TA amounted to \$**2,872.69**. The total for Output 1 is \$ **8,569,940**, for Output 2 is \$ **1,880,780**, and for Output 3 is \$ **2,092,930**, and annex 1 presented by quarter and implementing agencies together with sources of funding. With regards to the budgeting please note that Annex 2 shows the budget project codes, while Annex 7 shows the Project Implementation Plan.

Table 7: 2020 AWP BUDGET per DMF Output ('0.000\$)

DMF	MAFF	MOWRAM	MRD	UNASIGNED	TOTAL
1.1 Rehabilitating water management infrastructure to climate resilient condition	-	1,496.48	-	992.24	2,488.72
1.2 Upgrading agricultural cooperative value chain infrastructure	2,044.63	-	-	-	2,044.63
1.3 Improving connectivity to cooperatives and markets through climate resilient farm road networks	-	-	3,054.97	-	3,054.97
1.4 Strengthening infrastructure for agricultural quality and safety testing	40.02	-	-	-	40.02
1.5 Promoting renewable energy for value chain improvement	941.60	-	-	-	941.60
Subtotal Output 1	3,026.25	1,496.48	3,054.97	992.24	8,569.94
2.1 Deploying climate resilient varieties	567.62	-	-	-	567.62
2.2 Strengthening capacity in climate friendly production practices and technologies	862.27	-	-	-	862.27
2.3 Promoting farm mechanization and extension	450.89	-	-	-	450.89
Subtotal output 2	1,880.78	-	-	-	1,880.78
3.1 Formulating climate friendly agribusiness policies and standards	281.00	-	-	-	281.00
3.2 Promoting green finance and risk sharing mechanisms	270.45	-	-	-	270.45
3.3 Supporting climate risk management through ICT	1,541.48	-	-	-	1,541.48
Subtotal output 3	2,092.93	-	-	-	2,092.93
TOTAL	6,699.96	1,496.48	3,054.97	992.24	12,543.65
Project Management	2,872.69				2,872.69
GRAND TOTAL	9,872.65	1,496.48	3,054.97	992.24	15,416.34

Table 8: 2020 AWP BUDGET per IA ('000\$)

Agency	Q1	Q2	Q3	Q4	Total
MAFF	1,316.67	1,563.66	2,152.84	4,839.48	9,872.65
MOWRAM	38.45	117.89	321.39	1,018.75	1,496.48
MRD	25.23	23.74	1,207.15	1,798.85	3,054.97
UN-ASSIGNED	-	320.58	301.08	370.58	992.24
TOTAL	1,380.35	2,025.87	3,982.46	8,027.66	15,416.34

Table 9: 2020 AWP BUDGET per Fund Source ('000\$)

SOURCE OF FUNDS	Q1	Q2	Q3	Q4	Total
ADB	902.36	1,423.67	2,846.63	5,655.43	10,828.09
GCF Loan	-	8.28	182.78	344.02	535.08
GCF Grant	397.51	502.98	837.13	1,798.44	3,536.06
RGC	57.88	64.10	78.96	146.69	347.63
Beneficiaries	22.60	26.84	36.96	83.08	169.48
TOTAL	1,380.35	2,025.87	3,982.46	8,027.66	15,416.34

4.2 MAFF 2020 Program

The Ministry of Agriculture, Forestry and Fisheries (MAFF), is an Executive Agency (EA) that will be responsible for overall project management, procurement and financial management. The 2020 AWPB for the EA and other 3 IAs of MAFF is amounted to **\$ 9,872,650** and is shown in Table 10. The largest allocation is for the 6 consulting services packages (**\$ 3,816,750**) followed by Civil Works (**\$ 3,246,180**) is shown in Table 10, and detailed activities shown in Annex 3 which is presented by quarter and implementing agencies together with sources of funding.

Table 10: 2020 AWP MAFF BUDGET ('000 \$)

	DMF	L-3661 (ADB)	L-8346 (GCF)	G-0579 (GCF)	RGC	Beneficiaries	Total
1	Agricultural Cooperative	2,044.63					2,044.63
	Laboratory	20.00					20.00
	Renewable Energy	75.75		404.07	156.95	169.48	806.25
2	CARDI	332.30					332.30
	CSA			502.77			502.77
	Agricultural Development	272.45					272.45
	Engineering Workshops	178.44					178.434
3	Policy & PPP			52.02			52.02
	GAP			29.00			29.00
	Agribusiness			179.00			179.00
	Green Financing			103.68			103.68
	ICT			1,084.40			1,084.40
PMU	Project Staff				91.96		91.96
	Vehicles	117.39					117.39
	Per Diem & Travels	179.73					179.73
	Office Operation	61.88					61.88
Consulting Services	CS1	1,396.64					1,396.64
	CS2	866.63					866.63
	CS3			235.31			235.31
	CS4	100.00		357.08			457.08
	CS5	827.77					827.77
	CS6			33.32			33.32
Total MAFF		6,473.61	-	2,980.65	248.91	169.48	9,872.65

4.3 MOWRAM 2020 Program

The MOWRAM basically implements the irrigation program (Output 1.a) and the FWUC training program (activity 2.c) and their 2020 AWP is amounted to \$ 1,496,480 as is shown in Table 11 and detailed activities in Annex 4. The civil works concern 10 irrigation schemes and cover some 40 % of the total contract sum. The FWUC training concerns the same 10 schemes.

Table 11: 2020 AWP MOWRAM BUDGET ('000 \$)

DMF	Activity	L 3661-(ADB)	L-8346-(GCF)	G-0579 (GCF)	RCG	TOTAL
1	Gravity Irrigation	978.02	160.98	134.02	0	1,273.02
2	FWUC/O&M Training			69.66		69.66
PMU	Project Staff			0	72.54	72.54
	Vehicles	39.00				39.00
	Per diem & Travel	2.04				2.04
	Office Operation	32.28			7.94	40.22
TOTAL		1,051.34	160.98	203.68	80.48	1,496.48

4.4 MRD Program

The MRD ministry basically only implements the connectivity program (Output 1.c) and their 2020 AWP and budget are amounted to \$ 3,054,970 as shown in Table 12, and with details activities shown in Annex 5.

Table 12: 2020 AWP MRD BUDGET ('000 \$)

DMF	Activity	L 3661-(ADB)	L-8346-(GCF)	G-0579 (GCF)	RCG	TOTAL
1	Connectivity	2,272.95	374.11	311.47	0	2,958.53
PMU	Project Staff	0	0	0	18.24	18.24
	Vehicles	42.00	0	0	0	42.00
	Per diem & Travel	25.70	0	0	0	25.70
	Office Operation	10.50	0	0	0	10.50
TOTAL		2,351.15	374.11	311.47	18.24	3,054.97

4.5 Still Unassigned Activities (Ponds and Drip Irrigation)

There are still 2 activities (rainwater harvesting ponds and drip irrigation system) supporting to DMF (Output 1) for which it is still not clear which IA will responsible to implement mentioned activities. In terms of finances, the still unassigned part of the 2020 AWP0B amounts to \$ 992,240 as shown in Table 13, and detailed activities in Annex 6.

Table 13: 2020 AWP Still Disputed BUDGET

DMF	Activity	L 3661-(ADB)	L-8346-(GCF)	G-0579 (GCF)	RCG	TOTAL
1	Ponds	800,000	0	0	0	800,000
	Drip Irrigation	142,200	0	40,260		182,460
	Motorbikes	9,780	0	0	0	9,780
TOTAL		951,980	0	40,260	0	992,240

5 WORK PLAN OUTPUT 1: Critical Agribusiness Value Chain Infrastructure improved and made Climate resilient

5.1 Rehabilitation water management infrastructure (off-farm irrigation systems, on-farm rainwater harvesting ponds, drip irrigation) to climate resilient condition

5.1.1 Gravity Irrigation Schemes

5.1.1.1 General

The CS 5 consultant is assigned to assist the PMU, PPIU MOWRAM in the preparation of feasibility study and detailed engineering design of all gravity irrigation subprojects while CS1 is to review and endorse them. The topographic surveys, feasibility studies, detailed engineering design (DED) and social and environmental safeguards, and gender criteria screening and approvals for the first 5 schemes will be completed by 31 August 2020 and contracted by 30 November 2020. The contracting of the remaining 5 schemes will be done in 2021.

5.1.1.2 Trapaing Run scheme

The documents prepared by the PPTA for the implementation of the Trapaing Run scheme during the PPTA are in need of review. This concerns a) the design layout, b) the DDR and c) the Feasibility study. This review will be implemented by CS 5 with support from CS 1 and is expected that this review will be completed in April 2020 so that the tender can be launched before the end of April 2020.

5.1.1.3 Grouping the schemes in Priority Groups

The processes of grouping the original 27 irrigation schemes into 3 priority groups occurred in 2019. Table 12 shows the list of 10 high-priority schemes planned for 2020, which also includes the Trapaing Run scheme (see Table 5) with an estimated contract value of \$9.46 million. It is expected that for 5 of these 10 irrigations schemes the contracts will be signed in 2020. **Table 5** shows the proposed schedule for DED preparation.

Table 14: Ranking of 23 Nominated Irrigation Subprojects

Ref	Name	PRIORITY			TO BE DROPPED
		2020 (ha)	2021 (Ha)	uncertain (HA)	
Kompot Province: Irrigation Subprojects					
1	Tropaing Run	100			
2	Teok La'ak				100 converts to
3	Prey Takoch – Prawoek Pong	450			
4	Malech	800			
5	Trapaeng Boeung		800		
6	Kandourl		600		
7	Prawoek Pong			70	
	sub-total	1,350	1,400	70	
Tboug Khmum: Irrigation Subprojects					
8	Ta Khem Kbaal Teuk:	445			
9	Tropaing Tros	450			
10	Boeung K'Eth				1,120 because in Engineering Force project
11	Toul Pring	100			
12	2 Community/Tbong Damrie		600		
13	2 Community/Kampong Raing		250		

Ref	Name	PRIORITY			TO BE DROPPED
		2020 (ha)	2021 (Ha)	uncertain (HA)	
	sub-total	995	850		
Kampong Cham: Irrigation subprojects					
14	Ocherey				750 because of Urban pressure
15	Teuk Char		2,800		
16	Pram Kumoheak	635			
17	Kor aet		450		
18	O Kamprok	320			
	sub-total	955	3,250		
Takeo Irrigation Subprojects					
19	Prey Kdouch	550			
20	Kraing Empil	200			
21	Sdok Sam		300		
22	Trapaing Khorn			50	
23	O'Rumdoul		210		
	subtotal2	750	510		
	Total	4,050	6,010	190	1,970

5.1.1.4 Detailed Engineering Design

With regards to the Detailed Engineering Design the following procedure will be applied:

- (i) CS5 to consult PPIUs, local district officials, communes, existing or potential Agriculture cooperatives targeting ACs with a majority of female members, the Women's Farmers Network, and water users;
- (ii) CS5 take due account of projected climate change impacts and incorporate design features that enhance resilience;
- (iii) CS5 should propose to the MOWRAM and obtain approval what design standards to use. However, where innovative climate resilient improvements can be used, CS5 consultants will incorporate such innovations in the design providing sufficient justification for such additional costs, structures or practices can be proven.
- (iv) CS5 to prepare LARP, DDR, IEE, EMP and environmental code of conduct as necessary upon finalization of design.
- (v) CS5 to submit to PIC for review with relevant line agencies to ensure compliance with standards and regulations of the government.
- (vi) PIC to submit to PMU for approval

Table 15: DED Consultation Meetings during DED

Nr.	Timing	Aim of the meeting	Expected Outcome
1	At initial walk-through during the Reconnaissance Survey	To get feed-back from the farmers on scheme short-comings and expected improvements	Agreed Minutes of Meeting
2	At the beginning of the design phase	To get endorsement of the farmers on the layout of the proposed improvements works	Agreed Minutes of Meeting
2	After the detail Design for finalization	To get feedback from the FWUCS which parts of the works they intend to implement	Agreed Minutes of Meeting

5.1.1.5 Procurement

Following approval of PMU of the detailed engineering design, CS5 will assist the national technical department of MOWRAM in PMU with assistance from PMU and PIC in the preparation of the tender documents and contracts for the construction of the subproject following international competitive bidding or national competitive bidding depending on the estimated value of the package.

Table 16: 2020 Civil Works Contracts packaging

Province	2020	
	Nr of Contracts	Ha
Kampot	2	1,350
Takeo	1	750
Tboung Khmum	1	995
Kampong Cham	1	955
TOTAL	5	4,050

5.1.2 Construction Supervision

Construction Supervision will be the task of the provincial Water management and Irrigation Engineers of CS1 under supervision of the CS1 DTL MOWRAM. Where possible, women will be encouraged to work in unskilled labor construction activities on the schemes so that at least 25% of workdays will be filled by women to enhance income generating opportunities for women.

5.1.3 Drip Irrigation Schemes for Mango Farms

5.1.3.1 General

In 2020 the installation of 2 drip-irrigation mango sites is planned for with the design of these drip irrigation schemes being a joint activity of CS1 and CS 2. *The CS2 will work with GDA and the PPIUs to select the best drip irrigation demonstration sites in mango production areas.* This process of selection started in December 2019 and will be completed in February 2020. The detailed design will be prepared by CS 1 with an indicative budget of budget for each mango orchard of \$7,000 for drip irrigation equipment, \$3,500 for connection to a water source or tube-well and \$9,000 for the solar pump. For 2020, 5 sites are planned for drip system installation.

5.1.3.2 Site Selection Criteria

The selection criteria for drip irrigation demonstration sites include the following, the recipient: (i) must be a smallholder and not an absentee farmer; (ii) must have a land title, or equivalent and at least 5 ha of land; (iii) has marketing contacts that require Grade A fruit or has the potential of gaining such contracts; (iv) must grow the Keo Romeat mango variety or other climate resilient varieties that are amenable to floral manipulation and have market potential (v) has access to the water or water is available for a borehole and pond construction (if of sufficient size or replenishment to satisfy the water demands of irrigating mango) (vi) must be willing to allow several training days each year on farm and participate in training as trainer. In addition, given that drip irrigation sites will be installed on new planting, the selected sites must include some mature orchards and be located in an area where at *least 50 other mango growers operate.*

5.1.3.3 Procurement of the Drip-Irrigation Systems

Procurement of Equipment: Tenders can be launched in May or June 2020 and evaluated by the PMU with support from the PIC consultants.

5.1.3.4 Equipment Installation

It is expected that equipment can be installed in October 2020, at the start of the dry season, and that the installation companies will train female and male farmers to operate the solar pumping

systems and to undertake basic maintenance. Implementation monitoring and monitoring of maintenance will be undertaken by the PPIUs with support from PIC consultants. CS2 will provide training to the PPIUs.

5.2 Commissioning On-farm Rainwater Harvesting Ponds

5.2.1.1 General

In 2020 the installation of 80 rainwater harvesting ponds is planned for with the design of these drip irrigation schemes being a joint activity of CS1. The following steps will be undertaken in the commissioning of the On-farm rainwater harvesting ponds.

5.2.2 Verifications of the Proposed Locations and Drafting of the Designs

The CS1 provincial 'Water management and Irrigation Engineers' will assist with the processes of verifications of the proposed locations and the drafting of the Designs. Final approval of the proposed locations and Designs will be issued by the PMU at the endorsement of the CS1 PIC Team Leader or in his absence the responsible CS 1 PIC DTL. *It is preferable that ponds are sited in or near selected agricultural cooperatives*, especially ACs with a majority of female members, so that they can be included in CS2 training activities.

5.2.3 Procurement

Following approval of PMU of the proposed location and designs the CS1 team will assist in the process of the preparation of the tender documents and contracts for the actual implementation.

Table 17: 2020 Implementation Package Rainwater Harvest Ponds

Province	2020 (High Priority Ponds)	
	Nr of Ponds	Nr of Contracts
Kampot	20	1
Takeo	20	1
Tboung Khmum	20	1
Kampong Cham	20	1
TOTAL	80	4

Construction Supervision

Construction Supervision will be the task of the provincial Water management and Irrigation Engineers of CS1 under supervision of the CS1 DTL MOWRAM.

5.3 Upgrading agricultural cooperative value chain infrastructure (drying, processing and storage facilities) including Solar Energy

5.3.1 General

The CS2 Package have meanwhile identified 48 out of the planned 80 agricultural cooperatives, of which 20 cooperatives (4 contracts) will be prioritized for project support in 2020 with an estimated contract value of \$2.045 million. The process of the installation of these 80 agricultural cooperatives including solar energy will be a joint activity of CS2 and CS1. The following steps will be undertaken:

5.3.2 Verifications of the Proposed Locations and Designs

The CS1 provincial "Cooperative Storage and Roads' engineers will assist CS2 and the PMU in the process of verification of the proposed locations and the proposed Designs. Under the project

3 different types of agricultural cooperatives are planned for depending on their capacity 50 tons (24 units), 100 tons (44 units) or 200 tons (12 units) ton cleaning, drying and storage units. ACs with the majority of women members will be especially targeted.

The CS2 role at this stage will be to support GDA with solar roof units for the cleaning, drying and storage units on agricultural cooperatives to provide power involving the CS2 Laboratory / Solar Team. The budget allows for 80 solar photo-voltaic (PV) roof units including a 2.5 kilo-watt (kW) array and 12 kW hour batteries and inverter, each unit budgeted at \$7,000.

Assess installation sites: Once the cooperative sites have been selected, the Team will consult with the CS1 team leader and the National Cooperative Storage & Rural Roads Engineer Specialists to assess installation sites (on the basis of field data provided by CS1) and identify appropriate solar PV roof units. This is currently anticipated for the third quarter of 2020.

5.3.3 Procurement

The CS 2 Team will specify the solar PV roof units and recommend suppliers so that the PMU procurement staff to prepare a tender which should include installation, a five-year guarantee plus a five-year maintenance contract. It is expected that storage, cleaning and drying units will be tendered in three batches, in 2020, 2021 and 2022. The solar PV units will also therefore be tendered in three batches.

Post installation monitoring: After installation the CS2 Laboratory / Solar Team will assist the PPIUs to ensure the 5-year maintenance contracts.

Following approval of PMU of the proposed locations and designs the CS1 team will assist in the process of the preparation of the tender documents and contracts for the actual implementation.

5.3.4 Construction Supervision

Construction Supervision will be the task of the CS1 provincial "Cooperative Storage and Roads" engineers CS1 under supervision of the CS1 DTL MRD.

5.4 Improving Connectivity

5.4.1 General

For the activity of farm-road construction MRD recommends concrete roads for connecting the cooperatives to markets, and double bituminous surface treatment (DBST) in place of laterite road for farms to cooperatives. A combination of DBST in road lengths exceeding flood levels and concrete for road lengths below the flood level should be considered to minimize the cost. In 2020, eight roads of about 70.96 km in length and 3-6 meters in width with an estimated contract value of \$10.88 million (4 packages) will be rehabilitated to climate resilient condition. The responsibility for feasibility study and design of these roads is with CS 5.

5.4.2 Design Process for Roads

The following steps will be undertaken in the preparation of the DED for all roads:

5.4.2.1 Detailing of the Implementation Schedule

8 road subprojects in four provinces have been identified as High Priority with concrete road surface to connect the Agricultural cooperatives with markets. For the time being it is planned that in each of the 4 provinces 2 road subprojects representing 70.96 km should enter the DED process up-front to allow that for these 8 roads the construction works can be tendered for mid-2020. In place of laterite, in strong recommendation from MRD, a combination of concrete and DBST has been planned for 2022 for 102.50km road length.

Table 18: Schedule for Road Contracting

Province	2020/2021 (High Priority Roads)		2021/2022 (Medium Priority Roads)		2022/2023 (Low Priority Roads)	
	Road	Km	Road	Km	Roads	Km
Kampot	Concrete	20.10	Concrete	40.99		
Takeo	Concrete	14.73	Concrete	17.45	Concrete & DBST	38.36
Tboung Khmum	DBST	21.83	Concrete	26.63	Concrete & DBST	54.59
Kampong Cham	Concrete	14.30	Concrete	13.35	Concrete & DBST	9.55
TOTAL		70.96		98.42		102.50

Following approval of PMU of the proposed locations and designs the CS1 team will assist in the process of the preparation of the tender documents and contracts for the actual implementation.

5.4.3 Construction Supervision

Construction Supervision will be the task of the CS1 provincial “Cooperative Storage and Roads’ engineers CS1 under supervision of the CS1 DTL MRD.

5.5 Upgrading of quality and Safety Laboratory Equipment

5.5.1 General

For this activity to help the National Agricultural Laboratory (NAL) achieve ISO 17025 registration for biotechnology laboratory, in 2020 the support to NAL in 2020 will focus on laboratories supporting biofertilizer and organic fertilizer certification, and plant tissue culture, with the following step-wise approach is planned for: (i) recruitment of a national laboratory coordinator by 29 February 2020; (ii) re-assessment of infrastructure and equipment needs by 31 May 2020; (iii) capacity needs assessment of laboratory staff by 31 May 2020; (iv) prioritizing the infrastructure and equipment needs by 30 June 2020; (v) prepare tender documents with support from CS2 procurement specialist by 31 August 2020; and (vi) arrange training program for laboratory staff by 30 November 2020.

5.5.2 Design Process

The design will be made by CS 2.

5.5.3 Procurement

It is planned that the invitation for bids to supply laboratory equipment with an estimated contract value of \$1 million by 30 November 2020.

5.5.4 Construction Supervision

The construction Supervision will be the task of the CS2.

5.6 Installation of Green Energy Provision

5.6.1 Bio digesters

5.6.1.1 Procurement

The GDAHP / PMU will have access to a program support budget of up to \$3.36 million to support the implementation of the biodigester program and achievement of the disbursement targets. This is not included in the procurement plan in the PAM. Actual procurement packages for design and installation / construction of biodigesters and compost huts will be managed by the PMU. The procurement plan in the PAM envisaged 16 procurement packages and these will be open to the private sector under NCB procurement procedures. The support budget includes all training, marketing and monitoring and beneficiary identification and this is not therefore included in the procurement packages.

GDAHP, with support from CS1 and CS2 Packages, agreed to prepare bidding documents by April 2020 for installing 500 biodigesters and 250 compost huts with an estimated contract value of \$0.423 million. At least 40,000 women (50% of total beneficiaries) are targeted to benefit from biodigesters and compost huts by the end of the Project. However, actual installation in 2020 may be limited to 50% of the contract volume. GDAHP agreed to promote the private sector in biodigester program under this project, and to expand the scope of project support to smallholders and small commercial farms with less than 100 cows per farm. GDAHP, with support from CS2 Package and the National Biodigester Program (NBP), agreed to identify eligible beneficiaries by 31 August 2020, and conduct two training and marketing campaigns by 30 November 2020. GDAHP is expected to disburse US\$383,750 on training, monitoring, marketing and beneficiary identification in 2020. Women in particular will be actively targeted in promotion campaigns on the use of such renewable energy solutions.

The CS2 Laboratory / Solar Team will make recommendations for implementation arrangements for the actual biodigester program in the first and second quarters of 2021, once procurement details are agreed, the Team will analyze the different phases of implementation - conditions for implementation, reporting, construction, bio-slurry management, and monitoring and evaluation and will provide recommendations on important areas of development needed to accelerate national implementation and eventually to mainstream biodigester technology and usage.

5.6.2 Compost Huts

The economic cost-benefit analysis and technical justification for compost huts in cases where liquid slurry is not directly applied to crops will be further studied, and it is expected that a range of options will be made available to farmers, depending on the farm situation on a case by case basis.

5.6.3 Biodigester and Bio-slurry Standards

CS2 have submitted a briefing paper on biodigester standards and the international bio-slurry specialist will mobilize in May 2020 to prepare draft recommendations on bio-slurry standards. GDAHP will establish a working group and technical committee on biodigester and bio-slurry standards by 30 April 2020. The CS2 Package will mobilize the national bio slurry specialist by 29 February 2020 to assist with formation of working group and technical committee, including drafting the terms of reference (with support from the international biodigester standards specialist). The final draft biodigester and bio-slurry standards will be completed in the first and second quarters of 2021.

6 WORKPLAN Implementation Status OUTPUT 2: Climate Smart Agriculture and Agribusiness Promoted

6.1 Activity 2.1 Deploying climate-resilient varieties.

6.1.1 DMF Target: 2a. Three additional climate resilient varieties of rice and maize released

6.1.1.1 Partial Commercialization of CARDI

Under the CS2 package, technical assistance (TA) will be provided to CARDI to develop a commercialization program with recommendations on the legal framework to develop intellectual property rights and partial cost recovery for the institution.

6.1.1.2 Develop Action Plan

The CS2 Capacity Building Team will review the existing legal framework relating to seed production, distribution and marketing for rice and other crops such as maize in the second quarter of 2020. The action plan should be completed by the end of the second quarter of 2020.

6.1.1.3 Develop a Training Program and Workshops

The CS2 Capacity Building Team will develop and deliver a training program and workshops on the seed industry, institutional commercialization and intellectual property and breeder's rights for key CARDI staff. The training program will be developed during the second quarter of 2020. Experience of initiating institutional change indicates that all staff involved in the change process, need to be aware of what is happening and be given opportunities to express their opinion. Female staff in particular will be supported to attend trainings. The training program will therefore be very inter-reactive and will be delivered during the fourth quarter of 2020 and the first quarter of 2021.

6.1.1.4 Procurement of Equipment, Studies and TA

The CS2 Capacity Building Team will work with CARDI, IRRI (package CS3) and the PMU, on any procurement items that may be needed to fulfil the tasks identified during the fourth quarter of 2020 and the first quarter of 2021. The procurement, including subcontracting service providers, will be in accordance with the Government of Cambodia and ADB Guidelines on Procurement. The Team will monitor the procurement program in accordance with the agreement between ADB, Ministry of Finance (MEF) and the executing agency (EA). The total budget for supporting the CARDI partial commercialization process is \$165,000. This is included in the CS3 package.

6.1.1.5 Procurement of CS3

CARDI are ready to release two climate resilient varieties of rice (CAR 16 and Phka Mealdei) and one variety of maize (CM1) and sought project support for seed multiplication. IRRI will be invited to submit a technical and financial proposal to develop and deploy climate resilient varieties of rice, maize, cassava and mango, and assist with implementation of capacity building program on CSA. CARDI will review and improve the draft terms of reference for IRRI by 15 February 2020 prior to releasing the request for proposal, latest by 15 March 2020. The ToR will be amended to incorporate IRRI's agreement to coordinate with CIAT, CIMMYT and CARDI to ensure that Cambodia has climate resilient cassava and mango varieties available for early distribution to farmers.

6.2 Activity 2.2 Strengthening capacity in climate friendly production practices and technologies

6.2.1 DMF Target 2b: 40,000 farmers (of whom 16,000 are women) trained in CSA and agribusiness development skills, of which 50% are SRP compliant with direct links to millers and exporters:

6.2.1.1 Capacity Building

Gender responsive capacity-building will aim to ensure agricultural practices are in line with the global best practices and climate resilient standards. The CS2 Capacity Building Team understand both good agricultural practice (GAP) and CSA as a flexible and adaptable framework. CSA and GAP are not a series of top-down good-ideal practices to be demonstrated and followed as a formula by the farmers and communities.

The CS2 Capacity Building Team will arrange for some 16 staff from GDA will attend the “training of trainers” workshop on sustainable rice platform (SRP) by 31 March 2020 to commence building capacity of at least 1000 farmers (300 women) on SRP compliance by 30 November 2020. Such training will facilitate direct paddy marketing links with SRP affiliated millers and traders. CS2 Package will (i) finalize the draft training program on CSA by 31 July 2020; (ii) complete a comprehensive needs assessment and preparation of training manuals and materials for agricultural cooperatives by 30 November 2020; and (iii) commence training 100 mango farmers (at least 30 women) on compliance with CAMGAP for tropical fruit by 30 November 2020.

For rice, training will focus on SRP standards. SRP is not yet commercially recognized – therefore no price premiums are available to farmers who adopt SRP. Certification can be achieved at three levels. CFAVC training will focus on the basic level – self certification. Training for mango farmers will follow CAMGAP for mangos and will start in the fourth quarter of 2020.

It is anticipated that US\$172,000 will be disbursed on capacity building (TOTs, training materials and training) in 2020.

6.2.2 DMF Target 2c: 27 farmer water user committees/groups FWUCs/FWUGs made operational and 500 FWUC/FWUG members (of which 30% women) developed capacity to operate and maintain their irrigation schemes.

The activity of optimizing the FWUCS will be contracted to special service providers in consultation with MOWRAM and the PMU. It is planned that the activity of FWUCs and FWUGs formation and training will be contracted out in 3 contracts for all schemes for which construction will start in years 2020, 2021 and 2022 as shown in Table 20. These contracts will cover a period of 18 months to cover both the construction period and the following maintenance/liability period and have an on-the-Job training approach. CS2 Package will mobilize the national farmer water user community (FWUC) training specialist by 29 February 2020 to conduct gender responsive training needs assessments in four provinces by 30 April 2020 and prepare training materials for FWUCs and (FWUGs) by 31 July 2020. Women in particular, will be encouraged to attend trainings.

Table 19: Irrigation FWUC Training packaging

Province	2020 Contract (High Priority Nominated Schemes)		2021 Contract (Medium Priority Nominated + Additional schemes)		2022 Contract (Medium Priority + Additional Schemes)	
	Schemes	ha	Schemes	Ha	Schemes	HA
Kampot	3	1,350				
Takeo	2	750				
Tboung Khmum	3	995				
Kampong Cham	2	1,100				
TOTAL	10	4,050		5,500		5,500

Provided that FWUGs and FWUCs are established as soon as feasibility study (FS) are completed the FWUC / FWUG training program will be able to commence for each batch of irrigation schemes soon after the FS for each batch are completed. This will mean that training will start in 2020 for the first batch of perhaps nine irrigation schemes (category C) and in 2021 and 2022 for the remaining schemes. Training for FWUGs and FWUCs on each irrigation scheme will be undertaken over two seasons. DMF target: 500 FWUC/FWUG members (of which 30% women) developed capacity to operate and maintain their irrigation schemes (2017 baseline: 0).

6.3 Activity 2.3 Promoting farm mechanization and extension

6.3.1 DMF Target 2d: 4 provincial agricultural development centers and 4 engineering workshops made fully operational to provide agribusiness services and strengthen farmer value chain linkages

The following steps will be undertaken in making the Provincial Agricultural Development Centers (PADCs) and the Engineering Workshops (EWs) operational.

6.3.1.1 Verifications of the Proposed Locations and Designs

MAFF will design the new PADCs and EWs and the CS1 provincial consultants will assist with the processes of verification of the proposed locations and the proposed Designs. During the Inception phase the PMU proposed 4 locations for the PACs and also 4 for the Workshops which still have to be reviewed.

6.3.2 Procurement

Following approval by the PMU of the proposed location and designs the CS1 team will assist in the process of the preparation of the tender documents and contracts for the actual implementation in collaboration with the CS2 Laboratory / Solar Team (for solar PV units).

6.3.2.1 Engineering Workshops

The following steps will be undertaken in the commissioning of the Engineering Workshops.

6.3.3 Verifications of the Proposed Locations and Designs

The CS1 provincial consultants can assist with the processes of verifications of the proposed locations and the proposed Designs. Final approval of the proposed locations and Designs will be issued by the PMU at the endorsement of the CS1 PIC Team Leader or in his absence the responsible CS 1 PIC DTL.

6.3.4 Procurement

Following approval of PMU of the proposed location and designs the CS1 team will assist in the process of the preparation of the tender documents and contracts for the actual implementation.

6.3.5 Construction Supervision

Construction Supervision will be the task of CS1.

6.3.6 Activity 2.3 Capacity Building for farm mechanization and extension

6.3.6.1 Overview

The Project will finance the building of a PADC in each of Takeo, Tboung Khmum and Kampong Cham provinces and the rehabilitation of the existing extension/agricultural development center in Kampot. During the Inception phase the PMU proposed 4 locations for the farm PADCs which still have to be reviewed.

Design and equipment specification will be the responsibility of CS1. Training will be provided by CS2. The approach for mechanization workshop staff – where the specific intention is that the project will train them to train repair shop / workshop entrepreneurs / technicians will be a little different and a separate training program and training manuals will be developed during the third and fourth quarters of 2020. The possibility of PPP partnerships for the mechanization workshops will be examined.

CS2 Package will finalize a training program to provincial agricultural development centers and farm mechanization workshops by 30 November 2020. GDA will provide a list of staff to CS2 by 30 April 2020. The expected disbursement on capacity building for PADCs and MWs in 2020 is small and included in the capacity building budget above.

7 WORKPLAN OUTPUT 3: Enabling Environment for Climate Friendly Agribusiness Enhanced

7.1 Activity 3.1: Formulating climate friendly agribusiness policies and standards

7.1.1 DMF Target 3a: Climate-smart and gender-responsive agribusiness policy for target commodities, including a PPP framework focusing on agribusinesses formulated

The CS2 Policy Team will seek to ensure that Climate-friendly SRP becomes more widely utilized with the objective of facilitating eight of the largest Cambodia millers/exporters to be part of the Alliance. However, SRP is not yet commercially recognized – therefore no price premiums are available to farmers who adopt SRP, and the certification process is complex. The CS2 Policy Team will discuss this with the Rice Federation and GDA and seek to develop an approach to pursuing commercialization of SRP standards.

The CS2 Policy Team has completed an initial review of existing policies and strategies relating to agribusiness policy and an initial review of the progress of standards relating to CSA, GAP and SRP. Initial discussions have been held with the Department of Planning at MAFF. The CS2 Policy Team is now waiting to be formally introduced to the relevant working groups, technical committees and focal points so that they can develop a common action plan in cooperation with the relevant persons.

In conjunction with the relevant technical committees, the CS2 Policy Team will develop an action plan in the second and third quarters of 2020 with the outcome of presenting a draft gender responsive agribusiness policy for endorsement by the Minister of MAFF. At this stage it is proposed to focus on the agribusiness elements in the Industrial Development Plan for which MAFF has responsibility and, on the crops, identified for priority support. It is proposed that a study is conducted in Q4 on the relative competitiveness of Cambodia to attract agribusiness investment in comparison to Thailand and Vietnam.

Disbursement on agricultural policy in 2020 is expected to be US\$250,000.

7.1.2 DMF Target 3b: CAMGAP for tropical fruit and organic fertilizers endorsed as national standard for tropical fruit and organic fertilizers

The CS2 Policy Team will draft a CSA policy in close consultation with relevant Cambodian authorities and will ensure that the CSA policy will be reviewed by MOC and MAFF and jointly endorsed by both ministries. This process will continue through 2020 and 2021 to allow time for review and consultation.

7.2 Activity 3.2: Promoting green finance and risk sharing mechanisms

7.2.1 DMF Target 3c: 50 staff, including 30% women, from financial institutions trained in CSA and green finance

7.2.1.1 Overview

Undertake Comprehensive Landscape and Key Stakeholder Analysis: The CS2 Policy Team will conduct a comprehensive landscape and key stakeholder analysis to determine implementation activities existing in green climate financing, and the key stakeholders involved in each activity, including the implementation agencies and donor partners. The analysis will be undertaken in quarter 2 of 2020.

7.2.2 DMF Target 3d: 30 agribusinesses, including 30% women-led and/or owned² trained on green finance and CSA

7.2.2.1 PPP Framework

7.2.2.1.1 Overview

The Project will support in the following activities:

- (i) creating an enabling environment for PPPs in agribusiness in the four value chains;
- (ii) the identification of incentives for private sector participation in agribusiness particularly improving the private sector's access to green finance and ways to reduce the risk aversion of commercial banks;
- (iii) reducing the financial risks associated with the impacts of climate change on the raw material base.

7.2.2.2 Improving the Enabling Environment for PPPs

The CS2 Policy Team has developed an action plan and submitted it to the PMU. The plan covers a proposed meeting schedule as recommended by the design consultants, and a review of the frequency, type of meetings and recommendations of the participants to be invited.

Convene an Inter-Ministerial Committee (IMC)

To achieve the PPP objectives, the CS2 Policy Team will work with the PMU to support dialogues between public and private sector stakeholders at the national level through convening an Inter-Ministerial Committee (IMC). This activity requires PMU support and should commence in quarter 2 of 2020.

Organize Crop Centric Forums

The Team will also work with the PMU to promote the establishment of crop centric PPP forums for each value chain (cassava, maize, and mango) as well as participate in forums organized by the Cambodia Rice Federation; both of which will meet twice a year. Because rice is the most important crop under CFAVC, a workshop for rice will be organized in quarter 1 2020 to introduce CFAVC to stakeholders and gather feedback on value chain issues.

Organize Feasibility Studies for PPP Projects

The Project will hire consultants to undertake the feasibility studies within the first three years.

Organize Study Tours and Training

During the process of identifying 8 PPP projects for feasibility study, 30 agribusinesses, primarily agricultural cooperatives, will receive training in green finance and CSA. Training curricula will be

² Women-led and/or owned enterprises = enterprises with at least one of the following (i) at least 50% of senior managers are women, and/or (ii) at least 50% of enterprise ownership is controlled by women, and/or (iii) at least 50% of the staff are women

developed by the CS2 Policy Team in cooperation with the CS2 Capacity Building Team during quarter 3 and 4 2020 and training delivered in quarter 4 2020 and throughout 2021.

7.2.3 Bank Staff trained in Green Energy Financing

Undertake Comprehensive Landscape and Key Stakeholder Analysis

The CS2 Policy Team will conduct a comprehensive landscape and key stakeholder analysis to determine implementation activities existing in green climate financing, and the key stakeholders involved in each activity, including the implementation agencies and donor partners in quarter 2 2020.

Organize Workshop on Climate Friendly Investments in Cambodia

The CS2 Policy Team will plan, organize and facilitate a financial institution training session / workshop on green climate friendly investments in Cambodia, in coordination with other stakeholders in quarter 2 2020.

Explore Opportunities for First-loss Guarantees and Warehouse Receipt Financing

As part of the policy support on green finance and risk sharing mechanisms, the Project may explore additional opportunities to enhance financial sector participation in agribusiness investments during quarter 2 2020.

Develop Climate Safe Screening Criteria

The credit facility and guarantee scheme³ are expected to be available for only those projects that meet specific climate safe screening criteria. Appropriate criteria will be developed by the CS2 Policy Team in quarter four, 2020.

Finalize Design of the Credit Guarantee Program

The CS2 Policy Team will finalize the design of the guarantee scheme with all key stakeholders (Cambodian banks and ADB, Micro-finance Institutions (MFIs), and the Rural Development Bank) in such a way that the scheme remains simple to operate while offsetting against additional risks. This task will be undertaken in quarter 4, 2020.

Design and Implement Guarantee Training Program

The CS2 Policy Team will design a guarantee training program for banks / MFIs and the Rural Development Bank to understand guarantee criteria and eligibility, usage, and administration.

Field Visits to Green Investments

The CS2 Policy Team will conduct field visits with banks to review potential green financing projects during 2020 and 2021.

7.2.4 DMF Target 3e: 20,000 households, including 20,000 women, provided with information on climate risk sharing instruments

The project will seek to reduce risks associated with impacts of climate change, particularly for smallholder farmers, through creating an enabling environment for climate risk sharing mechanisms such as crop insurance under the guidance of inter-ministerial committee on crop insurance headed by the Ministry of Economy and Finance (MEF).

³ Believed to be a separate ADB project

7.3 Activity 3.3: Supporting climate risk management through Information and Communication Technologies (ICT)

7.3.1 DMF Target 3f: ICT platform for climate friendly agribusiness established in Kampong Cham province (2017 baseline: 0)

Many activities are planned for in 2020.

8 PREPARATION AWPB 2021

It essential that in the 4 CFACV participating provinces agricultural production centers are identified in which a cluster of activities will be implemented such as a) improvement of the gravity irrigation systems, b) FWUC development, c) training of the farmers in climate smart agriculture, d) construction of laterite access roads, e) improvement of the neighboring Agricultural Cooperatives, f) training of the AC members in Green energy and climate-risk sharing instruments and g) construction of a concrete road to the market. This activity should be a joint activity of the provincial authorities and the 3 mobilized consulting services packages CS1, CS2 and CS 5. For the 2020 program it has already.

9 OPERATIONAL BUDGET

A total of US\$ **701,200** is reserved for PMU operational costs as shown in Table 20.

Table 20: CFAVC AWP 2020 PMU Operational Budget (US \$)

Province	Budget Allocation			
	MAFF	MOWRAM	MRD	Total
PMU staff	91,960	72,540	18,240	182,740
Office	50,600	40,220	10,500	101,320
Vehicles	117,390	39,000	42,000	198,390
Translations	2,500	0	0	2,500
Per Diem	179,730	2,040	25,700	207,470
Meetings	2,880	0	0	2,880
Advertisements	3,400	0	0	3,400
Website	2,500	0	0	2,500
TOTAL	450,960	153,800	96,440	701,200

10 CONSULTING SERVICES

In 2020 3 additional TA consultants will be mobilize, viz. CS 3 for Seed multiplication, CS 4 for ICT and CS 6 for independent environmental audit. For the 6 Consulting Services the budget planned is **\$ 3,816,750** in the MAFF budget with details as shown in Table 21 below. CS3 is expected to be operational in QR3 and CS4 and CS 6 in QR3.

Table 21: Details TA Allocations (US \$)

Package		Budget Allocation			
		Remuneration	Reimbursable	Provisional Sum	Total
CS 1	PIC	1,118,920	234,880	42,840	1,396,640
CS 2	Training	702,630	132,000	32,000	866,630
CS 3	Seed				235,310
CS 4	ICT				457,080
CS 5	FS, DED	477,550	54,720	295,500	827,770
CS 6	Ind Envmt Audit				33,320
TOTAL		2,299,100	421,600	377,840	3,816,750

The provisional Sum locations under CS1 are to conduct a number of standard trainings on procurement, gender, social safeguards, PPMS, financial management and audit, and only to cover training locations and training materials. The per diems for the participants will come from the involved PMU budget.

The provisional Sum under CS5 is mainly to cover for the topographic and other surveys.