#### Blue Gold Program

362-Sher-E-Bangla Road, Khulna-9100

# <u>Report of workshop to find out constraints/opportunities and possible interventions</u> of output market actors and producers in vegetables value chain

## Introduction:

Vegetables are one of the most important subsectors in Bangladesh. The subsector plays a vital role in rural economy. Most farmers in polder areas (WMG member) cultivate winter, summer vegetables round the year either in dike or homestead to meet up own consumption and commercial basis also. Farmers are cultivating different types of vegetables taking technical and input supports from the input providers and respective government and non-government organizations. There are many actors involved with the sub sector but producer and output market actors play crucial role to run the subsector smoothly. Sometimes farmer's claim that they are not getting fare price due to many

reasons on the other hand output market actors sometime says their business are not running well as per expectation. Polder 27/1, 27/2, 29 and 25 are mostly vegetables growing area and other polders in specific portion also grown well vegetables.

Blue Gold Khulna, strengthening value chain engine organized three workshops in 27/1,





UAO of Dumuria in workshop



27/2, 29 and 25 Polder to find out constraints/opportunities and possible interventions of output market actors and producers in vegetables value chain. One workshop organized at training center of Department of Agricultural Extension, Dumuria, where 27/1 and 27/2 WMG members participated and other two workshops organized at united club, Rangpur and Sahos union parishad for Polder 25 and 29 respectively. Upazila Agriculture Officer of Dumuria was presented in all workshops.

## Major objectives of the workshop was-

- To find out basic information of vegetables VC (production and harvesting season, average production/acre, production cost, major markets in the polder, price, benefit etc.)
- Find out what types of vegetables farmers cultivate during winter and summer season and make a priority list



- Find out major constraints face by output market actors especially desired product, product specifications, volume/transaction (demand supply) and price fixation/negotiation
- Factors affecting price of vegetables and recommendation by output market actors for producers to get fare price
- To find out major constraints face by the producer's in terms of technology, water management, product price, product quality, volume, inputs/ output/ services market and presently how solve these constraints and find out better ways of solutions and
- Finally make a functional business linkage among output market actors, producers which will ensure win-win situation.

## Participants:

A total 55 potential WMG member who involve in vegetables cultivation and marketing from 55 WMG participated in workshop. Besides 13 output market actors mainly Arotdar and Paiker, 08 DAE officials

(UAO and SAAO's) and 01 BWDB (XO) were presented in workshop and contribute lot of information. Date, Polder and details of participants are given below in the table-

SL	Date of	Polder		Participants					
	Workshop		WMG member		Output market	DAE	BWDB		
			Male	Female	actors				
1	10 Oct'18	27/1 and	18	00	05	03	01	27	
		27/2							
2	14 Oct'18	25	06	11	04	03	00	24	
3	15 Oct'18	29	18	02	04	02	01	27	
Total	03	04	42	13	13	08	02	78	

## Find out priority vegetables, production/yield and production cost:

Participating WMG member, output markets actors and DAE representatives found out list of winter and summer vegetables are cultivating in the selected 4 polders. The group found out that 26 different types of winter (Tomato, Cauliflower, Knolkhol, Cabbage, Country bean, Red Amaranth, White Amaranth, Radish, Brinjal, Bottle gourd, Sweet gourd, Carrot, Spinach) and summer vegetables (Bitter gourd, Cucumber, Bottle gourd, Teasel gourd, Ash gourd, Snake gourd, Sponge gourd, Lady's finger, Yard Long Bean, Danta shak, Pink Amaranth, Sweet Gourd, Papaya) farmers are cultivating in Polder-27/1 and 27/2. After long debate among farmers, traders, DAE and BWDB the workshop make a consensus and prepare a priority list. From the total list then they find out major 07 winter and 07 summer vegetables. It is noted that farmer's involvement, area coverage, demand etc were major criteria to identify the priority vegetables in each polder. It was observed from the below table that Tomato, Cucumber and Bitter Gourd is the top priority in winter and summer vegetable season. The below given list is made on the basis of 1st one is 1<sup>st</sup> priority 2nd one is 2<sup>nd priority</sup> -------gradually. The priority list is given below in table-1

## Table-1

## Polder-27/1 and 27/2

Priority	Name of winter vegetables	Priority	Name of summer vegetables
1	Tomato	1	Cucumber
2	Knolkhol	2	Ash gourd

3	Brinjal	3	Bitter gourd
4	Bottle gourd	4	Yard long bean
5	Country bean	5	Ridge gourd
6	Radish	6	Lady's finger
7	Sweet gourd	7	Red Amaranth

and farmers of Polder-25 are cultivating 25 different types of winter(Bottle gourd, Tomato, Knolkhol, Cabbage, Sweet gourd, Country Bean, Radish, Carrot, Bitcopy, Sponge Gourd, Cauliflower, Red Amaranth, Spinach) and summer vegetables(Bitter gourd, Cucumber, Ash Gourd, Snake gourd, Yard Long Bean, Brinajl, Lady's finger, Teasel gourd, Dantashak, Pink Amaranth, two types of aroid). The priority list is given below in table-2

## Table-2

## Polder-25

Priority	Name of winter vegetables	Priority	Name of summer vegetables
1	Tomato	1	Bitter gourd
2	Bottle gourd	2	Cucumber
3	Knolkhol	3	Snake gourd
4	Sponge gourd	4	Brinjal
5	Cabbage	5	Ash gourd
6	Country bean	6	Lady's finger
7	Red Amaranth	7	Yard Long bean

28 different types of winter(Potato, Tomato, Knolkhol, Cauliflower, Cabbage, Bitcopy, Red Amaranth, White Amaranth, Spinach, Pink Amaranth, Bottle Gourd, Country Bean, Radish, Carrot, Ash Gourd, Yard Long Bean)and summer(Brinjal, Cucumber, Papaya, Bitter gourd, Teasel gourd, Snake Gourd, Sponge Gourd, Pointed Gourd, Lady's finger, Aroid, Sweet Gourd, drum stick) vegetables farmers are cultivating in Polder-29. The priority list is given below in table-3

## Table-3

## Polder-29

Priority	Name of winter vegetables	Priority	Name of summer vegetables
1	Tomato	1	Cucumber
2	Knolkhol	2	Ash gourd

3	Cauliflower	3	Bitter gourd
4	Brinjal	4	Yard Long Bean
5	Country Bean	5	Sweet gourd
6	Potato	6	Radish
7	Cabbage	7	Pointed gourd

## Yield and Production cost:

The workshop faced difficulties to calculate the production cost of prioritized vegetables because most of the farmers and traders don't have record of cost and benefit on the other hand farmers and traders can clearly memorized price of different vegetables at different time. Finally the workshop found out average production and price of vegetables are given in table-4. DAE representatives have contributed lot to find out yield and production cost. Production cost has been calculated considering land preparation, seed, seed/seedling sowing, chemical fertilizer, crop protection solution, fencing, net, bamboo, irrigation, harvesting, labor cost etc.

SL	Name of Vegetables	Production(MT)/hac	Production cost(Tk)/hac	Average Price( Tk)/kg
1	Tomato	25-30	123000	15-20
2	Knolkhol	60-70	74100	10-15
3	Brinjal	30-35	193000	20-25
4	Bottle gourd	35-40	95000	7-8
5	Country bean	18-20	120000	15-20
6	Radish	20-25	49400	8-10
7	Sweet gourd	30-35	62000	12-15
8	Cucumber	15-20	95000	15-20
9	Ash gourd	30-35	93000	8-10
10	Bitter gourd	12-15	172000	18-20
11	Yard long bean	10-12	76000	18-20
12	Ridge gourd	12-15	74100	8-10
13	Lady's finger	19-25	43000	16-20

## Table-4: Average production, production cost and price of vegetables

14	Red Amaranth	5-7	34000	10-15
15	Sponge gourd	85-90	91000	18-20
16	Cabbage	35-40	198000	15-18
17	Snake gourd	60-62	61000	18-20
18	Cauliflower	30-35	195000	18-20
19	Potato	35-40	98800	15-20
20	Pointed gourd	25-30	44460	22-25

#### Major market:

Farmers of Polder-27/1, 27/2 and 29 sells vegetables in Dumuria, Kaiya bazar, Tipna and Sonadanga bazar where there are about 220 vegetables traders. Dumuria Bazar is the nearest and big vegetables market in two polders. During peak season in winter around 15-20 truck/day and in summer season around 08-10 truck/day vegetables go to Dhaka, Chittagong and Sylhet from the Dumuria bazar. Sonadanga is another big vegetables market in Khulna town. Kalibari arot, Gazitola and Kalitola is the main vegetables market in polder-25 where about 50-60 traders come in the market. Around 5-7 truck in winter season and in summer season around 10-12 truck/day vegetables goes to Khulna, Dhaka and other district markets.

*Constraints face by Output market Actors*: The workshop found out the major constraints face by the output market actors are given below-

#### High transport cost:

Traders purchase vegetables from the above mentioned market and most of them sells in capital and other district markets. They think transportation cost is high and different types of harassment during vegetables travelling by the Transport Labor Association and low enforcing agencies( illegal subscription) **Storage facilities:** 

In maximum markets there are no storage facilities. If sometime not possible to sell, then we have to face losses or have to sale lowest price.

#### Credit sale:

Sometime traders have to sale on credit which is very risky and money may not return back timely **Finance:** 

Finance is one of the most important problems. Vegetables business is such business that requires regular working capital otherwise expected amount of vegetables may not possible to purchase **Uses of Jute and plastic bag**:

Maximum farmers use jute and plastic bag during transportation as a result quality of vegetables deteriorate seriously which consequences not only producers deprive from better price but also hamper traders business

#### Mixing of insect and disease affected vegetables:

Many farmers bring vegetables mixing of insect and disease affected which causes low price not only for the producers but traders face difficulties and their reputation in business affected. We/traders have to use additional labor means less profit margin

## Properly grading and sorting:

Maximum farmers don't grade their vegetables as a result they don't get expected price which also affect traders business

#### Constraints face by the producers:

#### High input cost:

Price of inputs (seeds, pesticides and fertilizer) are high and sometime adulterate inputs are sold by the input providers. Production cost depends on price of input and use of quality inputs.

#### Deprive of expected price:

Farmers don't get expected price. It is common problem raised by the farmers that they are not getting expected price due to various reason like syndicate of traders, unknown about market price etc

#### Information on market price:

Farmers do not have information on advance market price. Farmer claimed that it is mainly known to among traders. If we (farmers) get the market information in time we could bargain and got best price

#### Rainy day and bad weather:

Price of vegetables fall down if it is raining or bad weather. It is common problem if it is rainy or bad weather price of vegetables decline but some time opposite scenario is also happen. If such day supply of vegetable and presence of traders become less the price some time goes high. It depends on demand and supply

#### Syndicate:

Syndicate is one of the most common problem not only vegetables sub sector but also other sub sector. The syndicate mainly controls the price of different vegetables in different markets

#### Access to district and capital market:

Most farmers have no access in district or capital market. Generally the farmers sell vegetables nearby union or upazila markets. So they don't have access to district or capital market. The traders committed the workshop that they will provide market information if WMG member communicate with them

## Over all Recommendations for further win -win situation-

### Early cultivation and early marketing:

For higher price, always try to cultivate early and bring vegetables early in the market. It is common rule that when any seasonal product/vegetables first come in the market its demand and price both remain high and gradually the price decreases. For early cultivation it is necessary to know the information's of different vegetables i.e. which is early which is late variety and their sources.

#### Have to take risk:

For early cultivation farmers have to take risk. The risk related to properly identification and selection of right early and profitable variety with their management, adverse weather condition, pest and disease attack and their remedies, etc. Most of the farmers in our country don't have such mentality to take the risk. The farmers who take risk they get higher price.

## Use carrot instead of jute/plastic bag:

Most of the vegetables qualities deteriorate during the transportation time. Farmers mainly use plastic or jute bag which is cause of quality decrease resulting low price. To maintain quality and for better price use plastic carat instead of jute/plastic bag during transportation

## Early planning consider special occasion:

Price of some specific vegetable especially brinjal, cucumber and pointed gourd become high during Ramadan, so farmers have to cultivate considering the time for getting highest price. A very few talented farmers cultivate those vegetables to get the maximum profit.

#### **Government declaration:**

In some cases during Eid-UL- Fitre and Eid- UL- Azha government make restriction to enter truck in to the capital, that time price of vegetables goes down. So farmers and traders have to keep in mind, observe this situation and have to take positive decision. Though in some cases it is not possible as vegetables is perishable

## Avoid rainy day and bad weather:

Try to avoid harvesting during rainy/bad weather

## Proper grading and sorting:

Do not mix good and bad quality vegetables i.e proper grading, sorting and cleaning is must for better price

## Access to market information:

Try to understand/know market price of different markets through mobile phone and have to take decision where you will sell vegetables. If you have to take vegetables as business it is very much necessary to know different markets information

#### **Product specification:**

Different types of bottle gourd variety are marketed by the input company which color, size, shape and weight is also different. Some of the variety is small size, some are medium size and some are large size. The traders suggested that demand in market of bottle gourd that weight is 1-1.5kg and ash gourd is less than 1 kg weight. So farmers have to cultivate those varieties

Cucumber is one of the most popular and taste vegetable in summer season and mainly use as salad. Cucumber has also lot of Hybrid variety seed in the market which color, size, shape and weight in quite different. Maximum consumers like small size and green color. So farmers have to select those varieties

Tomato is the top priority vegetable both in three polders. It has also many hybrid varieties in the market. Consumers choice comparatively bigger size, red color and tight

Cabbage and cauliflower is most popular and demandable vegetable in our country and both have lot of hybrid variety in the market. According to the variety its size, color and weight are quite different. Medium size of cauliflower/cabbage with tight head is most demandable than small or big size

Country bean is also popular vegetable and most farmers cultivate in dike and in homestead area and it has different types of variety in the market. The country bean which variety has seed is most demand in the market

Bitter gourd and brinjal Consumers prefer the bitter gourd variety which has ridge. In case of brinjal consumers choice seedless variety

## Packaging:

Packaging is one of the most important factors for better quality and value addition. To get better price of cauliflower simple covering the curd with paper can add additional value and create more demand in the market. Most time black spot is seen in cauliflower head due to transportation resulting low price and less demand. If the curd/ head are covered with paper it looks fresh and demand will be higher. Very minimum additional cost is involved here.

## Workshop schedule

Time		Торіс	Method	Facilitator
9.00-10.00	•	Registration, self-introduction, opening, welcome	Self and	CDF, Polder Co-
		speech and objective sharing	Speech	coordinator, BDC
				and ZC
10.00-11.00	•	Discussion on goal and objective, major activities of	Participatory	Sr.Socio-
		Blue Gold program. Functionality of WMG's	discussion	Economist
11.00-11.15		Tea Break		
11.15-13.00	•	Discussion on basic information of vegetables VC	Participatory	BDC
		(Average area coverage, production and harvesting	discussion	
		season, variety, average production/acre, production		
		cost, major markets in the polder, price, benefit etc.)		
	•	Find out what types of vegetables cultivate during		
		winter and summer season and make a priority list		
		on the basis of area coverage, farmers involvement,		
		demand etc		
13.00-14.00		Prayer and lunch break		
14.00-15.00	•	Discussion on major constraints face by output	Participatory	BDC
		market actors especially desired product or product	discussion/plen	
		specifications, volume/transection (demand supply),	ary/group work	
		price fixation/negotiation, storage, transportation,		
		payment modality, finance, illegal harassment etc.		
		How they solve these constraints and find out better		
		ways of solution.		
	•	Factors affecting high and low price of vegetables and		
		recommendation by output market actors for		
		producers to get fare price.		
15.00-15.45	•	Discussion on major constraints face by the	Participatory	BDC
		producer's on modern technological information's,	discussion/plen	
		water management, product price, product quality,	ary/ group	
	1	volume, inputs/ output/ services market information,	work	

		finance etc. and presently how solve these		
		constraints and find out better ways of solutions		
15.45-16.15	•	Open discussion, concluding remarks and closing	Participatory	BDC/UAO
			discussion	