Table 1. Male dietary diversity score by Poisson regression

	Layyal	1		Bhakkar			Khushab		
Variables	В	Std.	Sig	В	Std.	Sig	В	Std.	Sig
		error			error			error	
Age	.005	.0084	.515	.002	.0080	.842	009	.0076	.237
Farming experience	.012	.0063	.049**	003	.0078	.737	.008	.0080	.295
Family size	058	.0295	.048**	.005	.0287	.848	025	.0272	0.095**
Farm size	023	.0135	.161	.003	.0118	.827	098	.0803	.224
Family structure 1.single 2.Joint	013	.0071	.072**	.020	.0826	.806	001	.0055	.043**
Distance from city	014	.0153	.360	028	.0155	.070**	027	.0156	.087**
Distance from main road	019	.0286	.506	016	.0303	.606	095	.0373	.002***
Distance from input/output market	024	.0114	.038***	.004	.0167	.827	.038	.0161	.018**
Local market in the village 1. Yes 2. No.	186	.1452	.200	161	.1920	.401	.319	.1717	.063**
Drinkable water available within 60 minutes in walk	.132	.2251	.559	084	.1984	.672	.033	.1778	.853
Road to village. 1.Yes2.	.174	.1161	.135	.246	.2065	.234	.029	.1774	.871
Crop diversity Index	.794	1.073	.038***	1.438	1.8365	.078**	.558	.2937	.057**
Income diversity index	.629	.370	.089**	.086	.2970	.772	.580	.2968	.050**
Family education index	022	.255	.930	.273	.2755	.322	.324	.2109	.124
Cash crop group	.018	.0131	.067**	.011	.0067	.099**	008	.0066	.234
Pulses crop group	014	.0199	.480	046	.0195	.019***	.015	.0191	.430
Vegetables and fruits group	.005	.0239	.826	054	.0224	.015***	028	.0215	.193

Table 2. Women DDS by poisson regression

	Layyah			Bhakkar	•		Khushab		
Variables	В	Std. error	Sig	В	Std. error	Sig	В	Std. error	Sig
Age	.006	.0085	.487	012	.0081	.122	.001	.0079	.906
Farming experience	.012	.0064	.062**	.014	.0078	.074**	.000	.0083	.959
Family size	064	.0299	.031***	.003	.0290	.913	012	.0287	.676
Farm size	013	.0069	.054**	003	.0042	.521	.014	.0060	.017***
Family structure 1.single 2.Joint	035	.0782	.652	.002	.0822	.984	064	.0854	.457
Distance from city	013	.0155	.406	.011	.0191	.567	028	.0158	.080**
Distance from main road	023	.0287	.422	.027	.0299	.368	.003	.0375	.939
Distance from input/output market	019	.0116	.097*	010	.0196	.614	.024	.0163	.135
Local market in the village 1. Yes 2. No.	224	.1446	.121	.045	.2100	.832	.137	.1923	.476
Drinkable water available within 60 minutes in walk	.047	.2206	.830	023	.2056	.911	016	.1883	.932
Road to village. 1.Yes2. No	.187	.1177	.112	103	.1765	.560	383	.2196	.081**
Crop diversity Index	.967	1.1298	.392	759	.4359	.082**	2.543	1.0557	.016***
Income diversity index	670	.3665	.173	297	.2985	.320	206	.3245	.525
Family education index	.493	.2479	.047**				129	.2294	.573
Cash crop group	.018	.0132	.068**	.013	.0064	.041**	.002	.0067	.724
Pulses crop group	009	.0190	.628	023	.0194	.228	.028	.0204	.176
Vegetables and fruits group	.014	.0241	.572	014	.0225	.531	027	.0228	.244

Table 3. Adolescents DDS results by poisson regression

	Layyah	<u> </u>		Bhakkar			Khushab		
Variables	В	Std. error	Sig	В	Std. error	Sig	В	Std. error	Sig
Age	.016	.0088	.071**	.014	.0082	.099*	.001	.0076	.873
Farming experience	.004	.0063	.557	007	.0080	.378	003	.0111	.776
Family size	.013	.0301	.660	014	.0289	.617	.057	.0271	.137
Farm size	.011	.0066	.091*	.008	.0043	.065**	.007	.0058	.229
Family structure 1.single 2.Joint	.021	.0788	.795	101	.0810	.211	144	.0834	.084*
Distance from city	.006	.0146	.673	002	.0180	.929	.023	.0189	.217
Distance from main road	077	.0313	.013***	.025	.0304	.412	.047	.0374	.211
Distance from input/output market	.001	.0113	.921	.023	.0185	.215	023	.0189	.230
Local market in the village 1. Yes 2. No.	.315	.1710	.065**	042	.1894	.823	104	.1930	.589
Drinkable water available within 60 minutes in walk	.051	.2498	.060**	104	.2014	.604	.182	.1718	.055**
Road to village. 1.Yes2.	.159	.1131	.160	158	.1755	.367	.312	.1629	.289
Crop diversity Index	346	.9159	.706	.441	.4905	.369	1.613	.9597	.093*
Income diversity index	.587	.3818	.124	206	.0965	.086*	065	.3206	.840
Family education index				.569	.3154	.279	334	.5189	.519
Cash crop group	008	.0122	.487	015	.0070	.027**	.010	.0066	.146
Pulses crop group	026	.0189	.164	.021	.0196	.071**	011	.0206	.594
Vegetables and fruits group	.000	.0250	.984	.013	.0225	.050**	052	.0222	.019***

Table 4. Children DDS results of poisson regression

	Layyah			Bhakkar			Khushab		
Variables	В	Std.	Sig	В	Std.	Sig	В	Std.	Sig
		error			error			error	
Age	005	.0100	.095	.004	.0088	.646	006	.0082	.432
Farming experience	.002	.0074	.739	.000	.0086	.954	.008	.0119	.492
Family size	.009	.0350	.087	030	.0313	.334	.014	.0303	.638
Farm size	016	.0088	.064	.006	.0046	.185	010	.0058	.078
Family structure 1.single 2.Joint	073	.0915	.024	.161	.0914	.078	.009	.0899	.922
Distance from city	.028	.0164	.088	.012	.0209	.575	.014	.0194	.467
Distance from main road	031	.0362	.098	.027	.0323	.402	049	.0395	.216
Distance from input/output market	.004	.0131	.065	010	.0213	.648	008	.0197	.689
Local market in the village 1. Yes 2. No.	326	.1677	.052	066	.1995	.741	060	.2078	.772
Drinkable water available within 60 minutes in walk	111	.2378	.642	088	.2303	.701	.010	.1955	.961
Road to village. 1.Yes2. No	.084	.1268	.008	159	.1927	.408	.216	.1956	.270
Crop diversity Index	1.172	1.0588	.268	.496	.5378	.357	2.079	1.0268	.043
Income diversity index	251	.0282	.028	.018	.3239	.057	.005	.3410	.989
Family education index	.0304	.1256	0.137	341	.0168	.083			
Cash crop group	.010	.0146	.086	006	.0073	.390	.003	.0072	.211
Pulses crop group	.014	.0223	.030	001	.0210	.965	1.468	.0220	.000
Vegetables and fruits group	008	.0288	.791	.041	.0245	.092	.024	.0235	1.014

Table 5: description of main food groups

Main food groups	Main items
Grains, white roots and	Rice, wheat, corn products: bread, cereals, pasta, bran, wheat
tubers	germ, pizza, pancakes
Pulses, beans, peas and	kidney beans, pinto beans, white beans, black beans, lima
lentils	beans, fava beans), dried peas (chickpeas, black-eyed peas,
	pigeon peas, split peas) and lentils
Nuts and seeds	Pulses, lima beans, peas, etc, soya beans, tofu, seeds, nuts,
	peanut butter
Dairy	Milk and milk products, yoghurt, cream, cheese
Meat, poultry and fish	Poultry, game, beef, sheep, processed meats, Fish, shellfish,
	shrimp, etc
Eggs	Eggs and egg products
Dark green leafy vegetables	Tomato · Carrots · Garlic · Bitter Gourd · Bottle Gourd ·
	Cauliflower · Cucumber.
Other Vitamin A-rich fruits	Tomato, carrots, mangoes, papaya, watermelon, and others
and vegetables	locally available vitamin A-rich fruits and vegetables
Other vegetables	Lettuce, green pepper, red pepper, lady finger, cauliflower etc
Other fruits	Orange, banana, lemon, watermelon, guava

Table 6: description of socio-demographic variables

Variables	Mean	Std. Deviation
Age	45.4	9.67
Education	7.80	3.30
Farming experience	12.74	9.06
Family size	4.35	3.53
Family structure	1.57	1.01
Distance from the city	14.98	5.43
Distance from the main road	2.89	1.25
Distance from input/output market	12.59	5.36
Local market in the village	1.04	0.13
Drinkable water available in the village	1.01	0.08
Road to the village	1.02	0.11

Table 7: Livestock production of districts in Pakistan by administrative unit.

Districts	Cattle	buffalo	Sheep	Goats	Camels	Horses	Poultry
Layyah	581844	301270	505287	571446	16344	3830	914458
Bhakkar	538278	260788	459540	655774	19339	3615	1020182
Khushab	344971	168385	167262	529176	8594	4708	581427