

**Table S1.** Germplasm sources used for developing dynamic mixtures of rice and beans. The material was obtained from farmers' fields, National gene bank, Agriculture Botany Division, and various NARC stations

<b>Location</b>	<b>Crop</b>	<b>Germplasm used</b>	<b>Total germplasm</b>
Jumla	Rice	Local landraces, released/registered varieties, breeding lines	66 (9 mixtures)
Jumla	Bean	Local landraces, released/registered varieties, breeding lines	48 (9 mixtures)
Lamjung	Rice	Local landraces, released/registered varieties, breeding lines	56 (12 mixtures)

**Table S2.** Pearson correlation coefficients<sup>a</sup> between days to flowering (DF), days to maturity (DM), plant height (PH, number of tillers (NT), number of panicles (NP), panicle length (PL), thousand grain weight (TGW), grain yield (GY), females' score at flowering (FFL); males' score at flowering (MFL); technical staff score at flowering (TFL); females' score at harvesting (FH); males' score at harvesting (MH); technical staff score at harvesting(TH); average score at flowering (MeanFL); average score at harvesting (MeanH) measured in Jumla, Nepal on seven mixtures and two checks.

	DF	DM	PH	NT	NP	PL	TGW	GY	FFL	MFL	TF	FH	MH	TH	MeanFL
DF	1														
DM	<b>0.919</b>	1													
PH	0.705	0.697	1												
NT	<b>0.863</b>	<b>0.913</b>	0.652	1											
NP	<b>0.871</b>	<b>0.922</b>	0.618	<b>0.997</b>	1										
PL	<b>0.911</b>	<b>0.872</b>	0.770	0.722	0.726	1									
TGW	0.349	0.231	0.250	0.450	0.446	-0.001	1								
GY	-0.528	-0.470	-0.565	-0.532	-0.520	-0.282	<b>-0.822</b>	1							
FFL	-0.594	-0.632	-0.317	-0.409	-0.438	-0.651	0.071	0.321	1						
MFL	-0.762	-0.796	-0.524	-0.531	-0.564	-0.770	-0.136	0.472	<b>0.822</b>	1					
TFL	-0.048	-0.234	-0.227	-0.125	-0.130	-0.267	0.359	0.009	0.633	0.289	1				
FH	-0.149	-0.221	0.011	-0.207	-0.222	-0.140	-0.249	0.146	0.379	0.328	0.213	1			
MH	0.241	0.171	-0.052	0.249	0.232	0.249	-0.277	0.202	-0.305	0.109	-0.197	0.099	1		
TH	-0.508	-0.633	-0.147	-0.398	-0.433	-0.572	0.128	-0.039	0.586	0.732	0.121	0.614	0.004	1	
MeanFL	-0.637	-0.728	-0.457	-0.483	-0.507	-0.712	0.037	0.385	<b>0.970</b>	<b>0.899</b>	0.631	0.400	-0.145	0.654	1
MeanH	0.190	0.175	0.133	0.271	0.242	0.180	-0.201	-0.024	-0.232	0.142	-0.319	0.447	<b>0.846</b>	0.320	-0.120

<sup>a</sup>Coefficients in italics are significant at 0.05%, those in bold are significant at 0.01%

**Table S3.** Pearson correlation coefficients<sup>a</sup> between days to flowering (DF), days to maturity (DM), plant height (PH, number of tillers (NT), number of panicles (NP), panicle length (PL), thousand grain weight (TGW), grain yield (GY), females' score at flowering (FFL); males' score at flowering (MFL); technical staff score at flowering (TFL); females' score at harvesting (FH); males' score at harvesting (MH); technical staff score at harvesting(TM); average score at flowering (MeanFL); average score at harvesting (MeanH) measured in Lamjung, Nepal on ten mixtures and two checks.

	DF	DM	PH	NT	NP	PL	TGW	GY	FFL	MFL	TFL	FM	MM	TM	MeanFL
DF	1														
DM	<b>0.894</b>	1													
PH	<b>0.897</b>	<b>0.907</b>	1												
NT	-0.272	-0.129	-0.287	1											
NP	-0.005	0.141	0.013	<b>0.917</b>	1										
PL	<b>0.936</b>	<b>0.846</b>	<b>0.926</b>	-0.364	-0.082	1									
TGW	0.625	0.647	<b>0.753</b>	-0.395	-0.266	0.593	1								
GY	<b>0.824</b>	<b>0.899</b>	<b>0.841</b>	-0.082	0.172	<b>0.864</b>	0.554	1							
FFL	-0.047	0.215	0.005	<b>0.769</b>	<b>0.830</b>	-0.100	-0.296	0.283	1						
MFL	-0.202	-0.067	-0.141	<b>0.763</b>	<b>0.744</b>	-0.286	-0.221	0.040	<b>0.732</b>	1					
TFL	-0.068	0.155	-0.076	<b>0.731</b>	0.691	-0.112	-0.370	0.224	<b>0.926</b>	0.614	1				
FM	<b>0.617</b>	<b>0.766</b>	0.562	0.069	0.298	0.533	0.125	0.695	0.577	0.188	0.549	1			
MM	<b>0.664</b>	<b>0.744</b>	0.643	-0.040	0.166	0.595	0.287	0.732	0.483	0.245	0.483	<b>0.909</b>	1		
TM	0.306	0.471	0.258	0.514	0.542	0.219	-0.079	0.427	<b>0.757</b>	0.393	<b>0.867</b>	<b>0.740</b>	0.669	1	
MeanFL	-0.102	0.132	-0.067	<b>0.813</b>	<b>0.816</b>	-0.163	-0.330	0.216	<b>0.978</b>	<b>0.815</b>	<b>0.947</b>	0.507	0.458	<b>0.765</b>	1
MeanH	0.570	<b>0.713</b>	0.525	0.204	0.368	0.483	0.118	0.667	0.662	0.304	0.694	<b>0.955</b>	<b>0.931</b>	<b>0.878</b>	0.632

<sup>a</sup>Coefficients in italics are significant at 0.05%, those in bold are significant at 0.01%

**Table S4.** Pearson correlation coefficients<sup>a</sup> between days to flowering (DF), days to maturity (DM), plant height (PH), number of tillers (NT), number of pods per plant (PodP), pod length (PodL), 1000 grain weight (TGW), grain yield (GY), females' score at flowering (FFL); males' score at flowering (MFL); technical staff score at flowering (TFL); females' score at harvesting (FH); males' score at harvesting (MH); technical staff score at harvesting(TM); average score at flowering (MeanFL); average score at harvesting (MeanH) measured in nine bean mixtures evaluated for three years in Jumla, Nepal

	DF	DM	PH	PodP	PodL	TGW	GY	FFL	MFL	TFL	FH	MH	TH	MeanFL
DF	1													
DM	0.384	1												
PH	0.607	0.582	1											
PodP	0.786	0.142	<i>0.761</i>	1										
PodL	<b>0.820</b>	<b>0.744</b>	<b>0.870</b>	0.707	1									
TGW	-0.713	-0.701	-0.431	-0.420	-0.790	1								
GY	-0.558	<b>-0.808</b>	<b>-0.883</b>	-0.561	<b>-0.899</b>	0.573	1							
FFL	<b>-0.863</b>	-0.227	-0.713	<b>-0.864</b>	-0.795	0.520	0.623	1						
MFL	-0.793	-0.301	-0.646	-0.794	-0.716	0.415	0.682	<b>0.816</b>	1					
TFL	-0.198	<b>-0.693</b>	-0.356	0.057	-0.360	0.129	0.533	-0.007	0.272	1				
FH	-0.361	0.013	-0.381	-0.576	-0.299	-0.006	0.388	0.489	<b>0.798</b>	0.114	1			
MH	-0.503	-0.214	-0.432	-0.572	-0.449	0.193	0.526	0.510	<b>0.886</b>	0.313	<b>0.949</b>	1		
TH	-0.328	-0.580	-0.563	-0.251	-0.583	0.385	0.580	0.357	0.362	0.395	0.411	0.424	1	
MeanFL	<b>-0.867</b>	-0.311	-0.735	<b>-0.848</b>	-0.783	0.430	0.698	<b>0.924</b>	<b>0.949</b>	0.281	0.663	0.733	0.386	1
MeanH	-0.453	-0.115	-0.460	-0.609	-0.408	0.081	0.501	0.558	<b>0.865</b>	0.244	<b>0.984</b>	<b>0.974</b>	0.441	0.751

<sup>a</sup>Coefficients in italics are significant at 0.05%, those in bold are significant at 0.01%