### **Appendix 2:** Interview and Survey Guides

I completed in-depth interviews with 25 growers (including 10 who were not currently contracting with the values-based supply chain, but had either done so in the past or had collaborated with VBSC members on field trials, production, or marketing), 15 other members of the supply chain (processors, processing plant workers, buyers, investors and board members) and 12 technical assistance personnel (university researchers, county extension agents, experiment station staff, federal conservation agency employees, organic inspectors, and nonprofit staff. Seven of the current VBSC growers also responded to the survey included in this appendix.

#### Interview Guide for Diversified Farmers on the Northern Great Plains

Liz Carlisle UC Berkeley, 2012

### I. Farming & learning background

- 1. When and how did you learn to farm/ranch? What person or organization, if any, helped you the most?
- 2. How did you first learn about Timeless/Kamut/Farmer Direct Co-operative? What made you want to grow for them and when did you start?
- 3. Do you or your family have a background in conventional commodity production? If so, can you describe your transition to the farming practices you use now?
- 4. How many generations of your family have been involved in farming, ranching, or rural community work? Do you draw inspiration from your parents, grandparents or other family members in pursuing agriculture the way you do?
- 5. What is the most valuable lesson you've learned in running this type of farm/ranch?

6. In your experience so far growing for Kamut/Timeless/Farmer Direct, what obstacle or situation has posed the largest challenge? How did you meet this challenge, and what did you learn from overcoming it?

### II. Farm management & philosophy

1. Do you have any farm/ranch partners helping you? Who are they, and how are the types of work distributed?

Farming Partner Name	Specialty	Comments	

- 2. Why do you farm/ranch like you farm/ranch? What are your goals? (general philosophy)?
- 3. How do you describe the added value of the products you produce: (environmental benefits, health benefits, taste, support rural livelihoods and community)
- 4. Personally, do you see your choice to farm/ranch this way more as an economic decision, an environmental decision, part of a social movement, or some combination?
- 5. How did you get access to the land you're currently using?

#### III. Information, networks, and research

- 1. Which of the following best supports you/holds you accountable to your sustainable farming/ranching practices (duplicate question from survey):
  - Price premium
  - · Organic certification/organic certifier
  - · GMO free certification/GMO-free certifier
  - Timeless Foods, Kamut, or Farmer Direct Cooperative
  - · Other buyers
  - Trademark protection/license
  - Formal farmer/rancher organization (like the Farm Bureau)
  - Formal farmer/rancher network or nonprofit (like AERO, NPSAS, SOG)
  - · Informal networks and neighbors
  - Consumers

- Conservation or other incentive programs offered by state, provincial, or national governments
- Environmental regulations or other policies enforced by state, provincial, or national governments
- Technical assistance providers associated with the government, university, or extension
- Experience with cooperative activities or associations
- Personal values
- Other

2. How do you	view the tension	on of cooperatin	g with other	alternative	farmers/	ranchers,	but
also competing	with them for	consumers' foo	d dollars?				

3. Tell me about your relationships with local universities and extension.

4. What research topics and research designs (randomized split block v. whole field comparisons) would be the most useful for your operation?

Kind of Research	Who would do it?	Comments

5. Have you participated in any on-farm/on-ranch research, conducted by yourself or others?

### IV. Energetics and environment

1. What practices do you do that you think are most beneficial to the environment? Do these make sense in terms of profitability?

Practice	Profitable (Y/N)	Comments

- 2. Do you use crop/livestock rotations or rotational grazing? Can you describe the rotation you use? Why do you rotate (fertility, break pest/disease cycles, variety of crops)?
- 3. Do you use any intercropping or undersowing practices? Can you describe them and explain why you use them?
- 4.Do you use cover crops or green manures? Which ones and for what purposes? Which crops do you rotate them with and on what schedule (when do you seed the cover crop, when do you incorporate it?)
- 5. What non-crop plants and animals do you intentionally or unintentionally support with your farming/ranching system and practices (pests, beneficial organisms, pollinators, wildlife)?
- 6. If you were to step back and view your operation from field to final point-of-sale, which parts are most problematic environmentally?

$\mathbf{V}$	Farm	finances	& local	Leconomies
ν.	rarm	IIIIIances	ex. ioca	i economies

- 1. How do you price the products you direct market? How do you decide if you need to change the price?
- 2. Including Kamut/Timeless/Farmer Direct, what marketing channels do you use? Can you estimate the percentage of sales from each?

Marketing Channel	Percentage of Sales	Comments

- 3. Do you grow any food for yourself and your family on your farm/ranch? About how much (relative to your total food needs)? What are the main benefits (financial, health, educational, taste, etc.)
- 4. What were your farm/ranch's gross annual sales in 2009? \_\_\_\_\_ What about net profit in 2009?
- 5. Approximately what percentage of this economic activity is from Timeless/Kamut/Farmer-Direct? \_\_\_\_\_
- 6. Compare your returns from *before* entering the Timeless/Kamut/Farmer Direct market to those you've earned since you began this contracting relationship. Are there advantages and disadvantages to each market?
- 7. Do you work together with other farms/ranches (in or outside of Timeless/Kamut/Farmer Direct) in production, marketing, distribution, or other efforts?

8. What have been the toughest times for you as a farmer/rancher? Do you feel like participation in this value chain helps you weather economic and environmental crises more effectively? Are there other aspects of your approach to farming/ranching that make your farm and business more resilient?

#### VI. Health Insurance

- 1. Do you have health insurance coverage?
- 2. If so, do you:
- Purchase it on the private market
- Get it from an off-farm job (yourself or your spouse's)
- Qualify for Canadian state health insurance, Medicare, Medicaid, or other government programs
- 3. What percent of your income, approximately, do you use to pay for health care?
- 4. Has your health care coverage status impacted your decisions about your farming operation (eg decision to take an off-farm job, decision to encourage children to find off-farm jobs, financially conservative decision-making in order to save money for potential health emergency, inability to work due to health conditions that could have been prevented had you been able to afford medical care)
- 5. How important do you think health care coverage is for your farming/ranching community more generally?
- 6. How would you describe the health care policy you support? (eg government sponsored single-payer plan, employer-based system with government-sponsored options for those who "fall through the cracks", employer-based system only (with self-employed purchasing on the private market), fully private and individual health insurance market (eg medical savings accounts)

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1. To what	extent do	you use vo	olunteers or	n the farm,	/ranch?	[interns, apprentices,	, CSA
members]							

2. Do you hire seasonal or temporary workers? How do you hire them, and when?

3. Are there labor laws that affect your use of volunteers? How about permanent and temporary workers?

4. What are all the positions that workers have on your farm/ranch? [Fill in the list below. For each of the following positions in the table ask the following questions:] How many \_\_\_\_\_ did you employ in 2011? What are their wage or salary rates? What benefits do they receive?

Position	# in 2011	wage/salary	benefits [health care, housing, free veggies]
Interns			
Apprentices			
Seasonal farmworkers/ranch hands			
Permanent farmworkers/ranch hands			

5. How do you and your farm/ranch partners value your own time spent working on the farm/ranch?

### VIII. Final questions

- 1. Are there any specific political or community issues affecting Timeless/Kamut/Farmer Direct farmers/ranchers that are especially popular or controversial right now? Is there a group or organization that you're working through to address these issues?
- 2. What advice would you give to young farmers/ranchers who are looking to get into sustainable or diversified farming or ranching?
- 3. Is there anything else I should have asked you?
- 4. May I contact you by phone/email if I have any follow up questions?

	iing and Kanch	ing on the Nor	mem Great r	
	ticipate in my study! This surve e survey, I will meet with you to			ng systems on the Northern Great d your experiences and
This survey should take about participation. I know you are b	: 15-25 minutes to complete. Yousy.	our responses in the survey a	are confidential, and I do \	/ERY much appreciate your
1. How many partr	ners manage your f	iarm or ranch? Fai	rm/ranch partne	rs are those people
who you consider	to be essential pla	yers in farm mana	gement and/or o	perations.
Number of partners:				
2. How many acres	s is your farm/ranc	h? This should inc	lude acreage of	all fields in your
farming operation				
Acreage:				

# 3. Of the total acres in your farming/ranching operation at the end of the 2011 growing season, how many were:

•	
Owned?	
Rented or leased public (government) land	
Rented or leased from a private landowner	
Leased for oil or gas development	
Leased for wind or solar development	
Leased to a telecommunications company	
Accessible to hunters (with or without a fee)	
Cropland?	
Rangeland or pasture?	
In field borders, grassed waterways, buffers, woodland, forest, or other areas associated with conservation practices but not cropped?	
Cropland planted to over- wintering plants - winter grains, perennial forages and annual cover crops (crops not harvested) or green manure crops (nitrogen-fixing cover crops)? Certified for organic production?	
Enrolled in the Conservation Reserve Program (CRP), the Wetland Reserve Program (WRP), the Conservation Stewardship Program (CSP), the Environmental Quality Incentives Program (EQIP) or similar program? Covered by a conservation easement?	
easement?	

5. Of the cropland you fa	rmed in 2011, how many acres were:
n grains?	
n pulses (dry peas, lentils, peans)?	
n edible oilseeds?	
n feed crops?	
n hay?	
n biofuels?	
n sugar beets?	
ı vegetables?	
fruit crops?	
nut crops?	
other types of crops?	
	any CROPS within the following crop types do you produce example, growing barley and wheat would count as 2 grai
6. Approximately how m	
i. Approximately how m he course of a year? For	
6. Approximately how me he course of a year? For erops.  Frains?  Ulses (dry peas, lentils,	
i. Approximately how method he course of a year? For trops.  rains?  ulses (dry peas, lentils, eans)?	
i. Approximately how method the course of a year? For the course of a year in the course of a year.	
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Approximately how me he course of a year? For rops.  rains?  ulses (dry peas, lentils, eans)?  dible oilseeds?  eed crops?  ay?  ofuels?	
Approximately how me he course of a year? For rops.  rains?  ulses (dry peas, lentils, eans)?  dible oilseeds?  eed crops?  ay?  ofuels?  ugar beets?  egetables?	
6. Approximately how m he course of a year? For crops.	

7. Approximately how many VARIETIES within the following crop types do you produce

over the course of	i a year? For $\epsilon$	example, grov	wing black b	ciuga id	, -	 •
chickpeas would	count as 3 va	rieties of puls	se crops.			
Grains?						
Pulses (dry peas, lentils, beans)?						
Edible oilseeds?						
Feed crops?						
Hay?						
Biofuels?						
Sugar beets?						
Vegetables?						
Fruit crops?						
Nut crops?						
Other types of crops?						
9. In what year did						
Direct Co-operativ						
Direct Co-operation						
Direct Co-operation Kamut Timeless						
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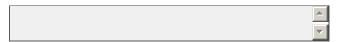
0		
	Yes	
0	No	
0	Some of my land is, but not all of it	
If ye	es, what year were you certified? If not, do your practices follow the organic standard or differ from it in important ways?	
		_
		~
11.	In 2011 did you use any sources of credit, such as a production loan?	
0	Yes	
0	No	
If ye	es, please specify which sources:	
		•
		7
12	. Do you have any farm/ranch animals?	~
	Do you have any farm/ranch animals?	<b>V</b>
0		~
0	Yes	<b>▽</b>
0	Yes	Y
0	Yes	<b>V</b>
0	Yes	<b>V</b>
0	Yes	7
0	Yes	Y
0	Yes	7
0	Yes	7
0	Yes	~

13. How many diff	erent SPECIES of livestock do you have? (Fo	r example, cattle, bison,
Number of species		
_	ferent BREEDS/VARIETIES of livestock do yo te angus cattle, black angus cattle, and bison	•
Number of breeds/varieties		
15. Do you have a	ny minor or heritage breed animals?	
Yes		
© No		
16. For each of the	e following types of livestock, please indicate	the total number SOLD in
Chickens (layers)		
Chickens (broilers)		
Other poultry		
Hogs and pigs		
Sheep and lambs		
Goats and kids		
Dairy cattle (cows, heifers, steers, calves, bulls)		
Beef cattle (cows, heifers,		
steers, calves, bulls)		
Bison		
Llamas or alpacas		
Other		

17. For each of the at the end of 2011		ivestock, please indicat	e the total number (	ON HAND
			1	
Chickens (layers)			]	
Chickens (broilers)			]	
Other poultry				
Hogs and pigs				
Sheep and lambs				
Goats and kids				
Dairy cattle (cows, heifers, steers, calves, bulls)				
Beef cattle (cows, heifers, steers, calves, bulls)				
Bison				
Llamas or alpacas				
Other				
18. Do you have a	ny draft animals?			
C Yes				
C No				
Please specify type and nun	iber.	<u> </u>		

# 19. Which of the following best SUPPORT you in your sustainable farming/ranching practices? Please rate the level of importance of each potential source of support below:

•		ротошто	or onon potentia		appoit below
	None or N/A	Low	Moderate	High	Very High
Price premium	O	O	0	О	O
Organic certification/organic certifier	O	O	O	O	O
GMO free certification/GMO-free certifier	О	O	0	О	С
Timeless Foods, Kamut, or Farmer Direct Cooperative	O	O	O	O	O
Other buyers	0	0	0	0	O
Trademark protection/license	0	O	0	O	O
Formal farmer/rancher organization (like the Farm Bureau)	0	0	О	0	0
Formal farmer/rancher network or nonprofit (like AERO, NPSAS, SOG)	0	O	O	0	O
Informal networks and neighbors	0	0	0	O	O
Consumers	O	O	0	0	O
Family members (including past experience)	0	0	0	O	O
Conservation or other incentive programs offered by state, provincial, or national governments	О	0	O	O	O
Environmental regulations or other policies enforced by state, provincial, or national governments	O	O	O	0	O
Technical assistance providers associated with the government, university, or extension	0	0	O	0	O
Experience with cooperative activities or associations	O	O	0	0	0
Personal values	0	0	0	0	0
Other (please specify below)	О	О	О	О	O
Other:					



# 20. Which of the following best HOLD YOU ACCOUNTABLE to your sustainable farming/ranching practices? Please rate the level of importance of each potential source of accountability below:

	None or N/A	Low	Moderate	High	Very High
Price premium	O	0	0	0	0
Organic certification/organic certifier	$\circ$	O	O	O	O
GMO free certification/GMO-free certifier	O	О	C	O	O
Timeless Foods, Kamut, or Farmer Direct Cooperative	O	O	0	O	0
Other buyers	0	0	0	0	0
Trademark protection/license	O	O	O	O	O
Formal farmer/rancher organization (like the Farm Bureau)	0	Ο	С	0	0
Formal farmer/rancher network or nonprofit (like AERO, NPSAS, SOG)	0	0	O	0	0
Informal networks and neighbors	O	O	O	0	O
Consumers	0	0	O	0	0
Family members (including past experience)	O	O	0	0	O
Conservation or other incentive programs offered by state, provincial, or national governments	O	O	O	O	O
Environmental regulations or other policies enforced by state, provincial, or national governments	С	О	С	С	С
Technical assistance providers associated with the government, university, or extension	0	O	©	©	O
Experience with cooperative activities or associations	O	0	О	O	0
Personal values	0	0	0	0	0
Other (please specify below)	0	O	O	O	O

21. Consider the peo	ople who pro	vide informat	ion to you to hel	p you manage	e your
peration. Please ra	te the level o	f importance	of each potentia	information s	source below
	None	Low	Moderate	High	Very High
Other Timeless/Kamut/Farmer Direct farmers	O	O	O	O	0
Other farmers outside Timeless/Kamut/Farmer Direct	O	O	O	O	O
Cooperative extension specialists	О	О	С	О	O
Conservation agents (such as NRCS)	O	O	0	O	O
Independent agricultural consultants	0	O	0	0	0
Fertilizer/input dealers or sales representatives	0	O	0	0	O
Farmworkers or interns on your farm	0	O	0	0	O
Formal farmer organization (like the Farm Bureau)	0	0	O	O	O
Formal farmer network or nonprofit (like AERO, NPSAS, SOG)	0	0	С	O	0
Other (please specify below)	0	O	0	O	O
Other:					
12 What farms of a		de			ifi l
22. What forms of co bove? Please rate t		-		-	
ibuve: Please rate i	None	Low	Moderate	High	Very High
n person conversations	O	© C	O	O	Very Fright
Phone conversations	С	O	0	0	0
Email	О	0	0	0	0
Other (please specify pelow)	0	O	O	O	O
Other:					

3. Consider how yo					
	ou access inf	ormation abo	ut managing you	ır operation f	rom sources
her than your soci	al networks.	Please rate th	e level of import	ance of each	potential
formation source	below:				
	None	Low	Moderate	High	Very High
nternet sources	0	0	0	0	0
Trade magazines	0	0	0	0	0
Cooperative extension pulletins	O	O	0	O	O
Libraries	0	0	O	0	0
Other (please specify pelow):	0	0	O	O	0
other:					
ebsite #1					
ebsite #1					
ebsite #2					
ebsite #3					
5. Do you have any	renewable e	electricity gen	eration on your f	arm, such as	a wind
	ntovoltaic nai				
enerator, solar pno	tovoitaio pai	nels, or metha	ne capture?		
	rovoitaio pai	nels, or metha	ne capture?		
C Yes	novoltalo pai	nels, or metha	ne capture?		
C Yes	novoltalo pai	nels, or metha	ne capture?		
C Yes		nels, or metha	ne capture?		A
C Yes		nels, or metha	ne capture?		A
C Yes		nels, or metha	ne capture?		A V
C Yes		nels, or metha	ne capture?		P V
C Yes		nels, or metha	ne capture?		A V
C Yes		nels, or metha	ne capture?		A V
C Yes		nels, or metha	ne capture?		Y
C Yes		nels, or metha	ne capture?		<b>△</b>
C Yes		nels, or metha	ne capture?		Y
C Yes C No		nels, or metha	ne capture?		Y
-		nels, or metha	ne capture?		Y V
C Yes C No		nels, or metha	ne capture?		Y
C Yes C No		nels, or metha	ne capture?		A V
C Yes		nels, or metha	ne capture?		Y

<b>20.</b> P	riease specify whether you use the following killus of fertilizers in your o	peration, and
wher	ere you get them (e.g., "on-farm", "purchased from local dealer two miles	away," etc.).
Manure	ure	
Compos	post	
Green m	r crop)	
Fish em	emulsion or other foliar izer	
	r OMRI approved mercial fertilizers	
Mineral	ral powders	
Syntheti	hetic fertilizer	
Other (p	r (please specify)	
27. P	Please specify whether you use the following off-farm inputs to manage i	nsect pests
□о	OMRI approved insecticides	
	Synthetic insecticides	
По	Oils	
☐ St	Sticky traps	
☐ PI	Pheromones	
	Other (please specify):	
Other:		
Other.		
	Please specify whether you use the following off-farm inputs to manage p	lant
_	thogens	
По	OMRI approved fungicides/bactericides	
	Synthetic fungicides/bactericides	
По	OMRI approved nematocides	
	Synthetic nematocides	
□ o	Other (please specify)	
Other:	er:	

# Diversified Farming and Ranching on the Northern Great Plains 29. Please specify whether you use the following off-farm inputs to manage weeds OMRI approved herbicides Synthetic herbicides Weed flamer Weed roller Diesel (through tillage, mowing, or swathing) Other (please specify) 30. Where does your irrigation water come from? (Please check all that apply.) Groundwater Surface water from an irrigation district Surface water independent of an irrigation district Rainwater collection on your farm 31. Do you use water conservation practices on your farm/ranch? (Please check all that apply.) Limiting water use Plant crops with minimal water needs Monitoring water use of green manure crops for timely termination Monitoring soil moisture Monitoring plant & weather for precise estimate of water need Water conserving tillage Soil cover, mulches or residue to prevent surface evaporation Perennial windbreaks Snow trapping Rainwater collection Use of recycled wastewater Conserving irrigation practices (such as low pressure drop nozzles, drip, irrigation water monitoring - PLEASE SPECIFY BELOW) Other (please specify) Conserving irrigation practices or other practices not in the list

#### Diversified Farming and Ranching on the Northern Great Plains 32. Do you or any of your farm partners hold off-farm/off-ranch jobs Yes No If yes, please specify the jobs held and whether they are part-time or full-time: 33. How many permanent employees do you have, not counting farm/ranch partners? Permanent employees: 34. In terms of profitability of your operation in 2011, would you say it was: O Very profitable? O Profitable? O Break-even? Operating at a loss? Operating at a large loss? 35. What age are you and your farm/ranch partners? You: Partner 1 Partner 2 Partner 3 Partner 4 36. What is the highest level of education you and your farm/ranch partners have completed? You Partner 1 Partner 2 Partner 3 Partner 4 0 0 0 0 0 Some high school 0 0 0 0 0 High school/GED 0 Some college or vocational 0 0 training 0 0 0 0 0 Two-year degree 0 0 0 Four-year degree 0 0 0 0 0 Master's degree 0 0 0 0 Ph.D. degree 0 0 0 0 Don't know 0

# Diversified Farming and Ranching on the Northern Great Plains 37. If applicable, what was the educational field/discipline of the degree? You Partner 1 Partner 2 Partner 3 Partner 4 38. What ethnicity are you and your farm/ranch partners? Partner 1 Partner 2 Partner 3 Partner 4 39. What gender are you and your farm/ranch partners? You Partner 1 Partner 2 Partner 3 Partner 4 40. Is there anything else you would like to add? You are done! Thank you again for your participation. I look forward to speaking directly with you on your farm/ranch. Please feel free to contact me with any questions or concerns at lizcarlisle@berkeley.edu This project is generously supported by a National Science Foundation Graduate Research Fellowship.