

Decision Case Number 6

The Farm in Transition Malven Hill Farm *Holistic Management® Decision Case*

As farming has become less economically attractive relative to other occupations, the problem of keeping the farm going as the younger generation leaves for schooling or to pursue other life goals, has become tragic in its proportions. This decision case describes the transition situation Malven Hill Farm faces and the options its decision makers are pondering.

1. From an early age Katy Sweeney's three young daughters have helped her run their 90-acre farm and its three major enterprises. They grow a three-acre market garden and sell fruits and vegetables in a CSA, a farmers market, and an organic produce marketing coop. They breed Haflinger draft horses for their own use and sale. They raise various other livestock: 4 Dexter cattle and 6 Boer goats for profit and pasture maintenance, composting hogs, and pest control chickens. All of these except breeding animals become family food or are sold after performing their annual farming functions.
2. As the daughters started coming of age and entering college, Katy could see the writing on the wall. How to manage it all as the daughters left for school and had to take summer jobs to save for school expenses? In answer to the question: Why not work full time off the farm? Katy says, "*That little piece of land is a good thing for the whole world, if I can maintain the soil. And, I like what I am doing. But as to how to do it, I have too many choices!*"
3. Katy has had unusual success in bringing up her children to love working the land, which they continue to do in the free time they have at home. Some of them may well return later to the farm full time. But at this stage of their lives she wants them to be free to broaden their life experience with learning opportunities that will take them away from the farm. Reluctantly, Katy has taken a part-time job, to make up for labor and income lost from the farm enterprises. If she wants to keep the farm going, what are her options for reorganizing the farm to make it through this difficult transition?
4. Katy started with clear ideas on the general design of the farm. She says: *I got into farming inexpensively. Using horse power is cheap, so is the equipment – pull it out of farmers' hedgerows. My draft animals are all small and easy to handle, and cheap to maintain. But I got into a labor conflict between the animal and vegetable enterprises: grass grows by itself and is 'free' animal fodder. Vegetables are small and easy to handle, not heavy. You can set up picking and packing and drive em away – it flows well. Vegetable growing equipment is very easy to handle for one person – so the CSA enterprise is doable – compared to animals that require haying and more people. I could buy hay,*

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have storage, keep only breeding stock over winter, and maybe still keep some of the animals, and keep the place eaten down, looking good, and making a profit. And a lot of the animal work happens in the seasons I'm not working with the vegetables: feeding hay, breeding. Horses have 11 month foaling; horses and goats are not a problem because kidding and foaling are timed to happen in Spring and all stock are on pasture from early Spring on.

5. Katy and her husband first started farming in 1988 and thought they would sell hothouse lambs. They found a place that was affordable to buy outright and would provide the resource base for the lamb operation: although not actively farmed for almost 50 years the farm was largely grass, had its own water sources, and all land was contiguous. By the time the flock got up to 180 ewes lamb prices were falling and the farm was not financially viable. A workshop on CSA motivated them to start one with 12 shares. Much of the farmland is steep hillside with poor drainage, but about 15 acres is well drained and most is on a south slope, making it relatively good cropland. The CSA expanded over several years to 50 shares and became a major income source. After her divorce Katy had to reduce it to 25 shares, the size it remains today.
6. Katy has sold market garden produce at a nearby farmers market, to her CSA, and to a more distant organic marketing coop. She dislikes all the standing and waiting of retail selling, but the summer-long farmers market income evens out the income flow: CSA money comes all in the Spring, and coop payments are often delayed for months. Selling to the coop requires a long distance delivery with a full truck, but she gets organic prices and can concentrate on a few products: potatoes, for example, instead of lettuce.
7. The sheep have been replaced as foragers with Dexter cattle, a rustic, self-sufficient breed. Two adult Haflinger mares and a Haflinger stallion provide all the power for farm work and produce young stock for sale as working teams. The breed is small – appropriate in scale for the farm – adaptable and good-natured. Katy's were chosen for stockiness and size for working harness. The farm uses two breeder hogs, purchased annually, to work the horse manure into compost. They are sold for meat or become family food at season end. Free-ranging chickens provide eggs and pest control.
8. By working part-time off the farm and keeping farm and living expenses low, Katy currently has enough income over living expenses to maintain automobiles for the daughters, pay their college tuition, renovate the house, and put money into a retirement fund.
9. Katy says, *“I want to keep the farm rolling, but if I did just vegetables, I would be letting the rest grow up in weeds and brush. Animals keep the fields from growing up and maintain field soil. Neighbors say years ago we could see all the way to the top of your farm.”* The mix of crops, variety of animals, ponds, forest, and

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pasture provides the diversity Katy desires to make the parts of the operation fit and run smoothly. The horses are both enjoyable in themselves, produce fertilizer, and pull the equipment, at practically no input cost. The market garden provides both income and food for the farm family, and the reject produce becomes feed for another animal on the farm. Diversity makes the farm look nice, provides recreational uses, and so makes the farm both enjoyable and profitable. Rotating the cows is also a walk in the woods or pastures. The wild areas provide their own products: firewood, venison. After spending a lot of time integrating animals into a vegetable operation, she reflects, *“I must really like animals.”*

10. To make up for labor, and therefore income, lost from the market garden as her daughters came of age, Katy took a job off the farm. But she says, *“There is a disjointed feeling to the farm work and interaction because everyone is working part-time off the farm. Working out feels choppy, because farm work is rushed to meet the deadline of leaving for the town job, and it takes me away from my youngest daughter.*
11. With three children still being supported, but not often at home to help with the work, Katy ponders a number of options:
 - Ø Develop a higher-end product that would bring in the same income with less labor. For example, focus on small fruit canes for the farmers market and coop.
 - Ø Change all market garden equipment so that it requires only one operator.
 - Ø Change vegetable marketing from three outlets (CSA, Farmers market, and farmers coop) to CSA.
 - Ø Find a balance between goats, cows, time, and profit. Create a farm livestock enterprise that maintains a low-cost base herd/flock, fulfills its required land clearing and soil maintenance function, and provides profit from sales of progeny.
 - Ø Continue the horse enterprise currently devoted to selling weanling colts, which brings less profit than trained teams but at minimal labor and fencing costs.
 - Ø Reduce the physically wearing and time intensive work of vegetable production.

The Decision Question: Considering these and other potential options, should Katy continue to work off the farm, and if not, how should she reorganize the farm?

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Exhibit A Whole Under Management Malven Hill Farm

People

The primary decision-makers are firstly myself, with my three daughters having a strong effect. My local family also has an influence. My neighbors and local customers direct decisions as well.

Secondary decision-makers would be other sustainable farmers, suppliers and distant customers, with state and local government also playing a role.

Resource Base

Malven Hill Farm has 90 acres in the rural, south-sloping hills of Chenango County. It consists of approximately 30 acres of woods, 30 acres of pasture and 30 acres of hay, with a 3-acre market garden. There is a 100 year-old house, under renovation, on a paved road with an old bank barn and newer attached livestock shed and separate machinery shed. A small shallow pond is near the barns and a $\frac{3}{4}$ acre pond is up in a hay-field near the woods. A small brook runs north to south through the property. The soils are a clay loam with hardpan at about a foot deep.

The machinery to hay and till the land is ground driven and intended for horses. There is both single and team equipment. The established fencing is all intended for horses.

The main livestock base is the 2 Haflinger mares and stallion, 6 Dexter cattle, and a few Boer-cross meat goats.

Money

Farm income is the only financial resource. The major income producers are:

<u>Enterprise</u>	Gross	Net	Expenses
CSA – deliver two days/week	14000	11000	3000
Off-farm job – nurse aide 2 days/week	7000	5000	2000
Produce for FLO – organic coop	1000	800	200
Livestock	1500	1500	0
Total	23500	18300	5200

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Exhibit B

Malven Hill Farm Holisticgoal

Quality of Life

I should be able to feel successful and content with my work and earn a living in a way that benefits myself and the larger world while living lightly on the land. I should be able to enjoy leisure time together with friends and family on the farm. I want to live where the air and water are clean, the food is tasty and healthy, the feeling is rural and the scenery is diverse.

Forms of Production

- Ø A market garden that provides profit from fruits and vegetables.
- Ø Meat, eggs and fiber to sell with an emphasis on local markets.
- Ø Farm products that are healthy for people to eat and that keep the air and water clean.
- Ø A schedule that provides time to be together with friends and family, and allows me to use my own products in my own household.
- Ø Daily activities that are enjoyable.

Future resource base

Our customers, mostly local, will be pleased with the taste and freshness of our products as well as the healthy and sustainable method of their production. The pastures and fields will produce well but not be forced to produce at levels beyond their native ability. The pastures will be grazed and the fencing adequate for the animals. The market garden will provide steadily throughout the seasons and be worked to suppress weeds and disease. The woodlot will be healthy, the yards maintained and the house have a well-kept appearance. The diversity of landscape features will be pleasing to the eye and also support a wide range of plants and animals, domestic and wild. A new generation will find the potential of the farm appealing and feel encouraged to use it so that the land remains in farming.

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Exhibit C Katy's Decision

I will quit my off-farm job. I will invest in more livestock: initially 8 more cows and 12 more goats, and use the profits from them to offset the income lost from the off farm job. The main new expense will be the purchase of more hay from the neighbor across the street. Gross profits from expanded livestock production will cover this expense and leave enough new profit to offset income lost from the off-farm job. I will use fencing materials available on the farm to add the necessary permanent fence. Sufficient movable fence, water, and winter shelter are available.

While all the options described have merit, the Holistic Management decision-making framework helped me choose this option as a first priority.

Some expected results: grazing the additional livestock will open two out of three fields to more sunlight, keeping them in grass and reducing standing water and attendant problems. The grazing effect will fertilize the soil, raise the ph and promote legumes. The increased capacity for water absorption and storage in the soil should make the more temporary streams on the farm run longer each season. Eventually I will have more time for market gardening: less time away or time preparing to leave the farm for the town job.

My prospective plans for the medium term: gradually expand livestock production with profits from full time farm work. Once the expanded livestock enterprise is running smoothly, there will be time and capital to expand into blueberries and re-establish strawberry production. I will consider adding cane fruits when the goats have removed the wild canes that are disease vectors.

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Katy's Evaluation of her Options at Malven Hill Farm Using Parts of the Holistic Management® Framework

Framework	Whole	Holisticgoal	Ecosystem Processes				Tools
			Community Dynamics	Water Cycle	Mineral Cycle	Energy Flow	
1. Develop a higher end product – cane fruit	No change	No conflict, but fails to address land management objectives	Concentration on specific crop decreases biodiversity	Requires watering from blossom to fruit – duck pond	Requires concentrating the compost, which raises Ph level	After initial input of human energy, a 10 year harvest, more net energy capture	Lots of human creativity and labor, some technology and money.
2. Change equipment to adapt to one farmer operator	Addresses problem of fewer people in whole	No conflict, but fails to address land management objectives	Adjusts for changes in human community	No change	No change	Single input: allows for all labor by one person	Change in technology, small adjustment for human creativity, some money
3. Change to CSA sales only	No change	Fails to address land management objectives	No change	No change	No change	May reduce fuel needs for marketing	Much more labor for marketing – completely reorganize pick/pack/delivery schedule
4. Balance ecosystem management with livestock	No change to customers required because the additional product appeals to present customer base. Increase in stock numbers	No conflict, serves land management objectives	Fewer undesired plants and more forage diversity: changes forbs, adds more grasses and legumes, deposits of ruminant bacteria	More open areas make for less standing water	Fertilizes the soil	Larger animal component increases energy capture and storage	Requires a rotation plan and additional fencing, grazing, animal impact, and living organisms
5. Continue horse enterprise for weanling sales	No change	No conflict	Decreases tension on horses and people as horse training for team sales	Needs only one herd, while teams production needs 2-3 groups, multiple water access, more stream protection	No change	No change	Grazing, animal impact, living organisms. Reduced training and handling labor compared to team production

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The Farm in Transition Malven Hill Farm Teaching Notes

Learning Objectives and Use: This case was designed by Karl North to introduce Holistic Management and provoke an appreciation of its value by contrasting its key elements – Whole Under Management, Holisticgoal, Ecosystem Processes and Tools, and Testing Questions – to conventional decision making tools and resources, in a real life scenario. It is intended for use with any group concerned with improving decision making on farms.

Lesson Plan: A 2-hour session in which a skilled facilitator and the farmer in the case lead the group through the following activities:

1. Explain to the participants:
 - a. What are we doing:
 - i. The farmer will briefly describe the farm and the situation it faces.
 - ii. Participants will receive a text that provides a deeper understanding of the situation, the options the farmer is considering, and a decision the farmer must make that is crucial to the future of the farm.
 - iii. Participants will grapple with this decision without use of Holistic Management, and by contrast see how the farmer practiced Holistic Management to address the problem.
 - b. Why are we doing it:

This segment of the workshop has a limited but important objective: to briefly introduce the components of the Holistic Management decision-making framework in the context of a real life farm situation that most farmers face. By demonstrating the value of the framework in coming to a specific decision, we hope to:

 - i. Familiarize you with the terms we will use throughout the workshop;
 - ii. Generate curiosity and enthusiasm to learn more.
2. Hand out the decision case and supporting documents and explain their use:
 - a. The goal: to use this information to propose an answer to the decision question at the end of the text.
 - b. The process: the group as a whole and in small working groups will work through preliminary questions that are commonly encountered in the decision making process, and then have an opportunity to debate the main decision.
3. Have the group read the decision case text silently, then take turns (every third person) reading a paragraph. Different people read options. **Alternative:** replace the silent reading with the farmer's live description of the farm and the situation it faces.
4. Introduce the farm photos and take questions. (**Alternative**)
5. Break the class into small groups of 2-3 and assign each group a question to answer using the text they have read and other handouts.

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6. Let each pair discuss its assigned question privately for 5 minutes and make notes on a flip chart.
7. Each pair shares the results of its discussion. (Questions and relevant components revealed progressively on screen) (**Alternative:** have questions on a flip chart – add components as they are discussed)
8. After each question is discussed, present the relevant Holistic Management® framework components such as Whole Under Management, Holisticgoal (farmer’s documents) and Testing Questions. With the farmer’s help, show their utility *in resolving that question*, in the decision making process. **Alternative:** Reveal farmer’s documents only in step #10.
9. As the questions progress and the pieces of the framework are introduced, unveil each piece of the Holistic Management® framework cumulatively, using the accompanying document “Questions and Relevance to the Holistic Management® Framework.
10. Facilitate debate on the decision question centering around decision options provided in the text.
11. Hand out copies of the farmer’s Whole Under Management , Holisticgoal, and Katy’s evaluation table. Briefly discuss the use of Holistic Management® framework to weigh one or two options. Then ask participants if they think that, based on the use of the Holistic Management® framework, she has made a different decision than their initial projection.
12. Ask the adaptive learning questions: What worked for you about this segment? What did not work? What have you learned that you will take home?

Supporting documents and Materials:

1. Decision case
2. Farm Whole Under Management
3. Farm Holisticgoal
4. The farmer’s decision
5. Questions & relevance to the Holistic Management® Framework
9. Flip charts and marking pens

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Questions and Relevance to the Holistic Management® Framework

1. What resources, human, physical, and financial, does Katy have available to her to help make changes in her business?	Whole Under Management
2. What does Katy want from her farm and for her life?	Holisticgoal: Quality of Life and Forms of Production
3. What do her daughters want?	Holisticgoal: Future Resource base
4. What are Katy and her daughters' financial needs?	Holisticgoal: Quality of Life and Forms of Production; Money source and use
5. Katy apparently wants to maintain her soil resource. How does she plan to do this? How does she know whether or not this is occurring?	Ecosystem processes, Monitoring tools, Feedback loop, Sustainability test
6. How do the local community, customers, suppliers, and other off-farm resources fit into the farm's future?	Whole Under Management: people Holisticgoal: future resource base, society and culture
7. What constitutes an enterprise on the farm? Are non-"commercial" activities (such as the composting hogs and pest control chickens) enterprises? Why does her farming include these activities?	Forms of Production, Gross Profit Analysis vs Marginal Reaction, Financial Planning, Ecosystem Processes, Sustainability
8. What are the causes of Katy's problem?	Cause and Effect
9. How is Katy going to know that her decision will serve her needs better than other options?	Marginal Reaction, Weak Link