Llamas Hardy Highlanders

Few animals can thrive in the harsh conditions of the Andean highlands, but llamas and their alpaca cousins are uniquely suited to the task. Their dense, soft wool keeps them warm, and they like to eat scrub vegetation that other grazers wouldn't touch.

#### Llamas and alpacas:

- Are gentle on soil thanks to their padded hooves
- Spit and neck-wrestle each other to establish pecking orders
- Are sometimes used as guard animals for other livestock



Llama wool is prized around the world for being dense, warm and softer than sheep wool—making it possible for our project families to earn a steady living by either selling the wool or making clothes and blankets. Alpaca fiber is considered one of the finest in the world, along with cashmere, angora and camel hair.

Omar Pachani lives in the isolated village of Pacharia high in the Bolivian Andes. Before receiving the gift of llamas, Omar's parents feared for his future. But now they are able to use the valuable wool from their llamas to earn income. Plus, they learned that by adding llama manure to their soil, they were able to double the size of their potatoes and increase the output of their fields by 150 percent. That means more food for Omar and his siblings to eat and more income from potato sales.

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69.RUIILLA15



## Goats SCRAPPY SURVIVORS

A goat is one tough animal. Goats can survive in almost any climate, due in part to their open-minded approach to eating: almost anything goes. Legend has it that a goat herder in Ethiopia discovered coffee after noticing his goats' high-energy frolicking after eating berries from certain plants.

These curious animals:

- Can climb steep cliffs and even trees
- Have horizontal pupils
- Can provide up to a gallon of milk every day

GOATS PROVIDE: Milk, Money, Manure, Meat, Material, Motivation



In the tiny village of Kaphadyani, Malawi, children like Elizabeth Bisai once faced a bleak future.

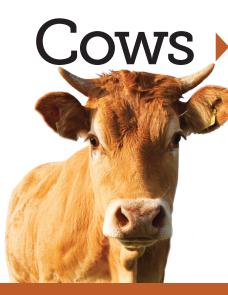
In fact, before we started a dairy goat project, Elizabeth's parents could only manage to earn about \$250 a year growing corn and tobacco. *"I couldn't grow enough to feed my family,"* said Elizabeth's mother, recalling how emaciated and malnourished the children were.

Now that they have a goat, they not only have a ready supply of nutritious milk, but goat manure has boosted the fertility of their farm and, in turn, their health. Plus, there is now enough income to send Elizabeth and her siblings to school—a key to breaking this family's cycle of poverty.

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### **GENTLE GIANTS**

Sure, cows are big animals, but they're giants in other ways, too. They are key animals in the history of farming, and the first animals that we gave were three cows named Faith, Hope and Charity.

Some other cow facts you may not know:

- Young female cows that haven't calved yet are known as "heifers"
- Cows have excellent vision-almost a 360-degree
   panoramic view
- Cows can totally get up if they're pushed over (sorry, would-be cow tippers!)



Oscar Kpesese lives in the village of Dodowa in Ghana. Before his parents joined a dairy project, Oscar's family was very poor and suffered from chronic health problems due to poor nutrition.

Then Oscar's family received the gift of a heifer and training in its care. Now they have nearly a gallon of milk to drink every day. Plus, by using manure to fertilize the crops, their harvests are much more abundant.

As a result, the family's income is up 200 percent and they are almost entirely self-sufficient. Best of all, they have already helped another family in need by Passing on the Gift<sup>®</sup> of a calf.

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69.RUIIHEF15





### **WOOLY WANDERERS**

Pastoralism has been fundamental to many civilizations, due in part to the flock behavior of sheep. Their tendency to follow and congregate closely with other members of the herd make keeping large groups together in unfenced pastures possible.

As key animals in human history, sheep:

- Were among the first animals to be domesticated around 10,000 B.C.
- Are prominent symbols in mythology, religion and even nursery rhymes
- Marked one of the most famous modern scientific milestones when Dolly the sheep became the first mammal cloned from an adult cell in 1996

SHEEP PROVIDE: Milk, Money, Manure, Meat, Material, Motivation



Sheep provide families with high-quality wool, and their milk is rich and nutritious.

Tening Thiaw lives in Ndiomgore, Senegal, where her family once struggled to survive from one day to the next. Everything began to change for them when they received the gift of sheep.

Their sheep are now producing a lot of manure which Tening's father has been able to use on his fields to improve the soil. In fact, their harvests have increased by 1,000 percent in some cases.

As a result, Tening's father says, "Now we don't feel hungry anymore. Now we can really have three meals a day for the whole year, which wasn't the case before."

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69.RUIISHP15



## Chickens > PLUCKY PRODUCERS

With a population of more than 24 billion, there are more chickens in the world than any other species of bird. For good reason, too; the fact that a single chicken can lay up to 200 eggs a year makes them an ongoing source of a power food.

How are eggs power food? Eating eggs is:

- A great source of protein
- Good for healthy brain function
- A good source of choline, which helps reduce birth defects

CHICKENS PROVIDE: Money, Manure, Meat, Motivation



In the village of Dalarik, Armenia, where Marietta Zakaryan lives, there are very few opportunities for young people. After graduation from the village school, Marietta wants to attend the police academy. It is expensive, but she has a plan.

As part of one of our special projects to engage young people, Marietta received a small loan, which she used to purchase 15 hens. They provide eggs that she is able to sell to local shops. After just one year, Marietta earned enough profit to pay back her loan and Pass on the Gift soon after. She reinvested her profits in 15 more chicks and expects to save enough by next year to pay for the police academy. "At some point she became the most reliable supplier of eggs, so all the neighbors started buying from her," says Marietta's grandmother proudly.

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69.RUIICHK15



## Honeybees > BUSY BODIES



The practice of collecting honey dates back to the Stone Age. Archaeologists have found pots of honey in ancient Egyptian tombs and were startled to find the honey unspoiled and perfectly preserved, proving honey's indefinite shelf life.

Honey isn't the only thing bees are good for. Bees are key pollinators, and:

- Single colonies can potentially double local fruit and vegetable yields
- Many crops wouldn't exist or would be dramatically reduced if bees weren't around, like apples, almonds and onions

#### BEES PROVIDE: Money, Material, Motivation



Feliciana Martin is a smallholder coffee farmer in Guatemala. With only a small, one-acre farm, she has been barely able to support her 2-year-old daughter, Sandy.

Heifer provided Feliciana with bees, a box, a hive, plus training and equipment for beekeeping. The bees help pollinate her coffee trees so they are more productive—in fact, she is expecting her coffee production to increase by about 10 percent next year. Of course, the bees also provide honey that she can sell for additional income.

Feliciana collected 60 pounds of honey and next year she plans to double the number of hives she owns so she can complete her promise to Pass on the Gift.

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## Water Buffalo POWERFUL PROVIDERS

Water buffalo are sturdy draft animals that help farmers plow fields and carry heavy loads to market. Unlike mechanical tractors, they don't need fuel to run or mechanics to fix broken parts.

Water buffalo are:

- Often referred to as "living tractors"
- Sometimes confused with the aggressive African buffalo, but they are biologically only distantly related
- Happy as long as they have a water source to lounge in

#### WATER BUFFALO PROVIDE: Milk, Money, Manure, Meat, Muscle, Material, Motivation



A farmer can plant four times more rice with a water buffalo than by hand—generating income to use for clothing, medicine, school and home improvements.

When Rocky Carag was born, his family was chronically hungry. The average daily income for families in his village in the Philippines was \$1.13. So when his mother was given the opportunity to receive the gift of a water buffalo and training in its care, she was overwhelmed with relief.

With a water buffalo to provide milk and draft power to help plow the fields, Rocky's parents have dramatically increased their income. They have built a sturdy new house and invested in their future by adding a pig to their growing farm.

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69.RUIIWTB15



## Ducks FLY TOGETHER

You may know that baby ducks are ducklings and male ducks are drakes, but did you know that a group of ducks is called a paddling? Ducks can paddle around all day in water and stay dry because of their specialized feather structure and a waxy coating on their outer feathers. Even when a duck dives underwater, its downy under layer of feathers stays completely dry.

Ducks are a great benefit for smallholder farmers. They:

- Produce bigger eggs than chickens
- Are great at pest-control, eating pesky gnats, mosquitos and other bugs
- Give great manure for soils

#### DUCKS PROVIDE: Money, Manure, Meat, Material, Motivation



Son Sinath lives in Dak Sorsor, Cambodia, with her family. "Before my family's living condition was very poor," said Sinath. "We had food shortages every year." Her husband had to take a dangerous job searching for and defusing landmines to support his family.

Then the family joined one of our projects, and Sinath received training and animals, including a starter flock of 10 ducks. Now she has 21 ducks—even after selling some of her ducks to buy two pigs. Since then, her family's income has increased significantly, she can afford to send her children to school, and she works as a community literacy facilitator. Sinath has even been able to help another family by Passing on the Gift<sup>®</sup>. "I think Passing on the Gift was the best activity in our life. I was so excited and happy that I cried," she says.

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69.RUIIDCK15



## THAT'LL DO

Pigs are useful for more than just making bacon. Because of their foraging abilities and excellent sense of smell, they are used to find truffles in many European countries. Sometimes their bristly hair is used to make brushes.

Pigs are great investments for farmers. They can live a long time (10-15 years) and are super low maintenance. They also:

- Don't need much land and can thrive on crop and garden scraps
- Provide manure to fertilize crops

Pig

• Can have 16 or more piglets a year

PIGS PROVIDE: Money, Manure, Meat, Material, Motivation



Before she joined one of our pig projects, Constance Ndèye Faye's small farm in Senegal only generated about \$1.18 per day in income and she never seemed to have enough food to feed her family. Now her small farm is thriving. She has 10 pigs and has already completed the requirement to Pass on the Gift of offspring. "Passing on the Gift® allows everyone to benefit from the project," Constance says. "Now almost all the women have pigs," she adds.

Constance's pigs have produced more than 30 piglets which she has been able to sell. Some of the earnings she puts toward food, but much of this new income goes to pay school fees. "I want my children to succeed so that tomorrow they will be able to manage their family," says Constance.

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69.RUIIPIG15



## RASCALLY Rabbits

Often appearing in folklore as a solitary trickster, rabbits actually live in groups. They make their homes in underground holes called burrows, and the group of burrows that forms a rabbit community is called a warren.

Rabbits are an exceptional community builder for farms, too. Rabbits:

- Are very easy to maintain because they don't need
   much space
- Require little to no medical care
- Thrive on grass and scraps from the field or the kitchen
- Provide a nutrient-rich fertilizer
- Can have up to 80 babies, also called kittens, a year



Enithe Luxius lives in Haiti, where so many people live in extreme poverty. For Enithe and 100 families in her region, an opportunity came in the form of rabbits and training from one of our projects. The rabbits reproduce rapidly and can be kept in cages high off the ground. They are a great solution for the community.

Enithe keeps a small notebook in which she charts the family tree of her rabbits. The four rabbits supplied to her, which she named Mr. Sedye, Germaine, Jakob and Jacqomy, have already multiplied to 17. "Any time we finish a cage for one of them we have to build another house because we know it's going to multiply," she said. That is a good thing because the more rabbits Enithe has, the more money she can save to buy a house in an area less vulnerable to frequent floods.

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69.RUIIRBT15



# Tree Seedlings

Trees are some of the largest and oldest organisms in existence. The tallest tree, a redwood that has been named Hyperion, is 379-feet tall. The oldest tree, a bristlecone pine called Methuselah, is nearly 5,000-years-old.

As a keystone of our ecosystem, trees:

- Remove carbon dioxide from the air
- Reduce soil erosion
- Provide habitats for wildlife
- Provide food and material and medicine for people
- Moderate the climate

TREES PROVIDE: Money, Material, Motivation



A family with a small orchard or grove can supply its own fodder or firewood, sell fruit or nuts and begin saving to build a new house or pay for a child's education. Plus, tree roots hold together topsoil and lock in moisture and nutrients.

In Honduras, Maria Elsa Castellanos is one of a group of women entrepreneurs who received cashew seedlings as part of one of our projects. Armed with their cashew trees, training on how to prepare and package cashews to be sold, and help connecting to key markets, Maria and the other women have thriving businesses that significantly increase the income of their family farms. Many farmers lost their entire corn harvest in recent droughts, and without the cashew project they would have had little to no income at all.

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69.RUIITRE15



## GOLDEN > Geese

Real geese may not lay literal golden eggs, but like the fable, they are a source of prosperity for those that own a gaggle.

Goose eggs:

- Are the staple in many regions of the world, rather than chicken eggs
- Can be cooked the same way as chicken eggs
- Are much larger (about four times the size) and have a slightly different texture than chicken eggs



Dang Hong Thuy and her husband, Nguyen Hong Le, raise geese as part of their integrated farm in Vietnam. Before joining one of our projects they only raised frogs and fish, but now they've expanded to geese, ducks, chickens and even cattle.

Extensive training made it possible for them to expand their business exponentially and care for these animals. Not only do they care for the dietary needs of geese and many other animals, but they also learned how to look out for sickness and give vaccinations. After two years in the project, the family's income increased almost tenfold and they are able to send all three of their children to school.

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69.RUIIGSE15



## TEACH A MAN TO Fish



What do you think fish have in common with trees? You can count their age by the number of growth rings they have on their scales. The act of farming fish and other aquatic creatures is known as aquaculture.

The consumption of fish is growing, and:

- Today people eat, on average, four times as much fish as they did in the 1950s
- Fish is low-calorie and high-protein
- The high omega-3 fatty acid content means that eating fish can reduce the risk of some diseases

#### FISH PROVIDE: Money, Meat, Motivation



In Tanzania, after building his first fish ponds, Nicholas Mwakabelele saw his family eating well and getting medical care, his children going to school, his farm growing, and he was able to build a new home for his family. His neighbors soon heard of his success and came to check out his project.

Among these neighbors was Wailos Nzalayaluma, a blind man who begged Nicholas for a meal. Nicholas' answer was one of compassion but not the one Wailos expected; instead of giving Wailos some fish to eat, Nicholas passed on the gift by helping Wailos construct a fish pond of his own and giving him fish fingerlings to start off. Wailos is now able to support himself and save for his family, and Nicholas has gone on to train more than 240 other families in fish farming.

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69.RUIIFSH15



## Irrigation TAPPING THE POSSIBILITIES

Millions of people around the world still lack access to clean drinking water. In the impoverished communities where we are working, many of the homes lack running water, and some families do not even have a well nearby. Instead, they must spend each day fetching water. This is often a chore left to the children—especially girls—leaving no time for school.

We help families install treadle pumps that:

- Maximize the number of growing seasons
- Save water and allow them to expand the types of crops on their land
- Are cheaper than using motorized pumps, and more efficient than using buckets to fetch water

#### **DID YOU KNOW?**

Approximately 663 million people lack access to clean waterthat's more than two times the population of the United States.



In Malawi, as in many developing countries, women walk miles to fetch the water and balance water buckets on their heads even as they haul children on their backs. It's women who need water to get the cooking and washing done. It's also women who tend to their children when they fall sick with cholera, or diarrhea, or other waterborne illnesses.

In recent decades as access to water became a challenge for more people, we began dedicating more of our resources to helping people tap the water they need to become self-reliant. One such project has opened access to clean water and future possibilities for Agnes Hedisoni and the whole community of Ndaula. Never before has the community had such a safe, abundant supply of water so close to home.

HEIFER.ORG 888.5HUNGER

69.RUIIWTR15



Biogas •

## **REUSED REFUSE**

For most families in the places where we work, cooking usually means gathering firewood by hand, which often depletes the soil and robs the environment of its trees. In addition, smoke inhalation in poorly ventilated homes often leads to chronic lung and eye diseases.

A biogas stove is a better option. It will:

- Run off methane gas captured from animal waste
- Burn cleanly, reliably and efficiently
- Be better for the environment, more sustainable and healthier for families feeding their children

#### **DID YOU KNOW?**

Smoke from indoor cooking is responsible for an estimated 1.6 million deaths each year.



In Uganda, Zaina Muyobo learned about biogas through a commercial on the radio. Today, not only is she a proud owner of her own biogas digester, but she also works as a biogas promoter in her village. As a promoter, she invites local farmer families to her home for biogas stove demonstrations.

Muyobo credits the bio-slurry, a rich fertilizer that is a byproduct of biogas production, with her success as a coffee farmer. Not only does she sell enough coffee to afford a comfortable lifestyle for her family, but her coffee plants are of such high quality that Uganda's government agency that regulates the coffee industry buys her seeds and has made her a nursery coordinator. When asked her favorite thing about biogas, Muyobo was delighted to share, "It's free gas! It's free fertilizer! It's free money!"

HEIFER.ORG 888.5HUNGER

69.RUIIGAS15



## Women's Empowerment



It would be difficult to overstate the importance of empowering women worldwide. Gender inequality consistently puts women at a disadvantage; they simply do not have the same access to resources and opportunities as men.

We work to empower women in a variety of ways, including making sure women:

- Are able to get healthcare
- Have an education
- Make autonomous decisions about their finances

#### **DID YOU KNOW?**

When women are in charge of spending decisions, they invest 10 times more than men in improving their family's welfare.



One of our projects in Nepal is to improve nutritional status of participants through gender-focused programs. Women farmers become part of self-help groups and are provided livestock, seeds and saplings, and trainings such as improved animal management and our 12 Cornerstones for Just and Sustainable Development.

One such farmer is Mithu Adhikari, who received one nanny goat through the project. With her new income, Mithu decided to increase the size of her farm by taking out a loan from her new cooperative. It worked, and thanks to the increase in income, Mithu was able to send her two sons to school and build a new house for her family. Mithu's husband doesn't need to look for work elsewhere. He can return home and provide full-time help with the farm.

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69.RUIIWMN15

