

KUMOI FARMS

CERTIFIED PIGGERY

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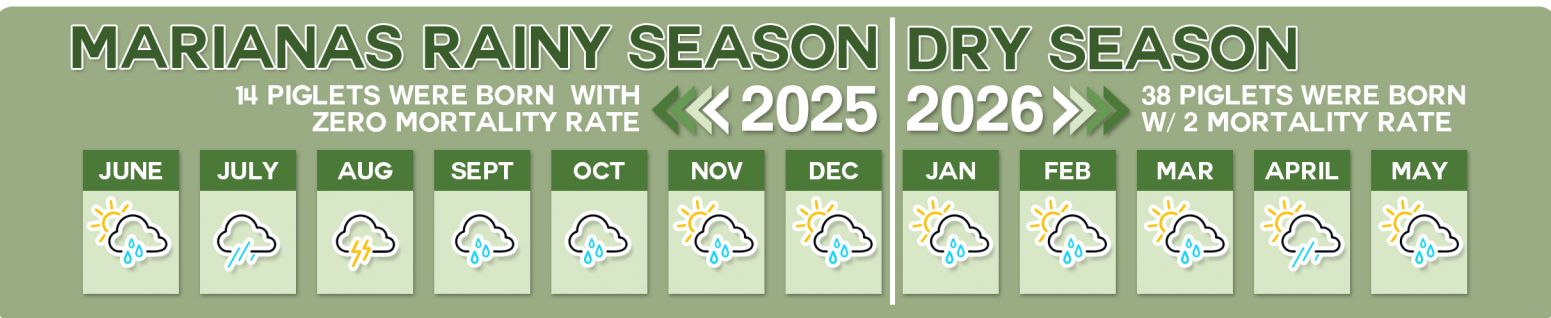



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KUMOI FARMS SUSTAINING PIG FARMING IN THE MARIANAS INITIATIVE PROJECT | FACT *sheet* OVERVIEW

THIS FACT SHEET SUMMARIZES FINDINGS FROM THE WSARE FUNDED SUSTAINING PIG FARMING IN THE MARIANAS INITIATIVE AT KUMOI FARMS IN SAIPAN. THE PROJECT COMPARED PIGLET OUTCOMES UNDER IMPROVED ENVIRONMENTAL MANAGEMENT VERSUS BASELINE CONDITIONS AND FOUND HIGHER PIGLET SURVIVAL AND MORE CONSISTENT LITTER QUALITY UNDER IMPROVED CARE. WHILE BASELINE CONDITIONS SHOWED GREATER VARIABILITY, ESPECIALLY DURING EXTREME WEATHER ASSOCIATED WITH TYPHOON SINLAKU, A TEMPORARY FARROWING SYSTEM ALSO RESULTED IN ZERO CRUSHING MORTALITY, DEMONSTRATING A PRACTICAL APPROACH TO IMPROVING PIGLET SURVIVAL AND STRENGTHENING LOCAL FOOD PRODUCTION SYSTEMS IN THE MARIANAS.

ENVIRONMENTAL MANAGEMENT DURING THE RAINY SEASON, EACH SOW RECEIVED IMPROVED CARE THROUGH INCREASED HYDRATION AND ENVIRONMENTAL CONTROL MEASURES. THIS INCLUDED ELECTROLYTE SUPPLEMENTATION IN DRINKING WATER, CONSISTENT NUTRITIONAL FEEDING, AND THE USE OF HEAT LAMPS, HEAT PADS, AND FANS TO REGULATE TEMPERATURE AND AIRFLOW.


CONSISTENT ACCESS TO CLEAN WATER AND BALANCED FEED WAS CRITICAL FOR MAINTAINING SOW HEALTH AND SUPPORTING STRONG, UNIFORM LITTERS. ANY DISRUPTION IN FEED OR WATER AVAILABILITY QUICKLY AFFECTED ANIMAL CONDITION AND REPRODUCTIVE PERFORMANCE, MAKING STEADY SUPPLY MANAGEMENT ESSENTIAL FOR SUCCESSFUL PRODUCTION.



- HEAT LAMPS AND HEAT PADS ARE MOST EFFECTIVE WHEN USED ONLY FOR NEWBORN PIGLETS AND COLD STRESS PERIODS, NOT CONTINUOUSLY FOR ALL STAGES CONDITIONS.
- ALWAYS ENSURE SAFE PLACEMENT AND SECURE MOUNTING TO PREVENT FIRE RISK AND ACCIDENTAL CONTACT WITH ANIMALS.
- PROVIDE A WARM ZONE AND A COOLER ESCAPE AREA SO PIGLETS CAN SELF-REGULATE TEMPERATURE AND AVOID OVERHEATING.
- COMBINE HEAT SOURCES WITH GOOD AIRFLOW (FANS OR NATURAL VENTILATION) TO PREVENT MOISTURE BUILDUP AND RESPIRATORY STRESS.

ESTIMATED TOTAL PROJECT COST PER SOW

- (INCLUDING FEED, WATER, AND BASIC INPUTS): \$1,200–\$1,600 PER GESTATION CYCLE
- TEMPORARY FARROWING SYSTEM COST (AMORTIZED PER USE): \$300–\$500 PER LITTER
- HYDRATION + HEAT MANAGEMENT INPUTS (ELECTROLYTES, ELECTRICITY, EQUIPMENT USE): \$150–\$300 PER CYCLE
- ESTIMATED TOTAL COST PER LITTER MANAGED UNDER IMPROVED SYSTEM: \$1,650–\$2,400



CONCLUSION

- THE SYSTEM IS COST-EFFECTIVE WHEN PIGLET SURVIVAL IS IMPROVED, ESPECIALLY IN SMALL-SCALE ISLAND PRODUCTION.
- THE GREATEST ECONOMIC BENEFIT COMES FROM REDUCING MORTALITY AND IMPROVING LITTER CONSISTENCY, NOT FROM REDUCING INPUT COSTS ALONE.
- OVERALL, THE INVESTMENT IS WORTH IT FOR PRODUCERS FOCUSED ON SURVIVAL RATES, RESILIENCE, AND LONG-TERM HERD STABILITY.

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