



# Export Market

## *Background*

The USPB dehydrated (dehy) potato program began in 1999 with the primary focus of introducing and promoting US dehy products through education of the trade in the target markets of Japan, Mexico and the Philippines. It has evolved to also include country specific programs for China, South Korea, Indonesia, Malaysia, Thailand and Vietnam.

Education has been carried out through trade shows, seminars, reverse trade missions and one-on-one technical meetings. In addition to basic dehy information on the characteristics and different products available, the trade, in most target markets, is ready for new technical information regarding the functionality and benefits of utilizing US dehy in a variety of applications.

The snack food sector is mature in most target markets and there are limited opportunities for the USPB to offer additional support to further the sales in this area. In the bakery sector, illustrating the benefits of utilizing dehy in bakery applications has been the focus; however, more country specific research on bakery products needs to be conducted. Variables such as wheat flour strength, water ph, sugar content in bread formulas, etc. all affect the formulation of the dough and finished baked goods and need to be accounted for when showing the benefits of using dehy. Another challenge of this segment is the amount of dehy utilized. Although the overall opportunities of this segment are large, currently, the small amounts of dehy utilized in bakery products limit overall export growth.

New products, channels and sectors such as slice, dice, shreds and “instant mashed potatoes” in food service, mass catering and food manufacturing have yet to be tapped in most markets. This would represent net new business; however, more information for these targets needs to be developed. Information such as the cost benefit of using dehy, reduced staff time for preparation or even nutrition benefits needs to be developed along with new menu concepts and ideas integrating US dehy into local cuisines.

The USPB has been actively promoting dehy for use in the US government international food assistance programs. This is an extremely difficult process, but success has been achieved with the USDA administered programs. The process is just beginning with the programs administered by USAID and the UN World Food Programme. Since the inception of the USPB International Food Assistance Initiative 9,770 MT of dehydrated potatoes worth \$9.65 million has been purchased through USG funding. Additional dehy has also been purchased directly by the PVOs.

## *Challenges*

Past programs reached out to broad targets and were designed to educate a general population of companies. This effort was refined by programs designed to increase the number of channels in which dehy is utilized by providing more specific technical information and support. These programs have been very successful, but constraints still exist to increased exports to the targeted markets.

There is still a significant lack of understanding of dehy by the foreign trade, its multiple uses and the alternative products available. This is compounded by a lack of documentation of all of the potential uses of dehy and the benefits of using dehy. Further hindering the adoption of new uses and products is the lack of technical experts on dehy available in the markets.

Created demand is still going unmet because of the lack of importers and distributors handling the full range of dehydrated potatoes in many of the markets. High tariffs in a number of markets, high shipping costs and quotas in Korea and other markets further hinder US exports.

In 2007, reduced worldwide potato supplies increased demand for US products and therefore, higher prices also plagued the market. In 2008, reduced US potato supplies and high dehy prices affected exports. In response many importers turned to the EU and China for supplies. The EU continues to undercut US prices and gain market share, especially considering the shipping cost advantages they have. Increased competition from China into dehy target markets is becoming a challenge.

### *Solutions/Strategies*

We have come a great distance in educating the foreign trade about the basics of US dehydrated potatoes – its various products, quality and versatility. However, there is a great deal more education which needs to be conducted, not only about the basics of dehy to a broad audience, but specific technical information on the benefits of using US dehy in a variety of food applications. A “library” of technical information on the uses and applications of dehy needs to be built and shared with target sectors so that they may quickly utilize the information and apply it to their processes. Each market is very unique and the programs and activities must be tailored specifically for local tastes and formulations. In order to maintain market share, but also grow the pie, several strategies are recommended.

#### *Educate and train the trade on new uses and applications of dehy and the benefits from doing so.*

The USPB will increase the demand for dehydrated potatoes in the foreign markets (grow the pie) by introducing dehy into new channels such as retail, food service and food manufacturing. The introduction will be based on research and development that demonstrates the benefits and applicability of these new uses in the new channels. Many potential customers in the international markets are unaware of the product and its potential uses. Those that may be aware of the product do not fully understand its many uses and benefits. Education of the trade will be done through trade shows, seminars, technical assistance, newsletters, merchandising visits, websites and the trade press.

Strengthen the US position in the markets by introducing new dehy products and assisting importers and distributors to assure availability of US dehy in all target markets.

The international market place for dehydrated potatoes is very competitive so the USPB must do everything it can to assure that the US gains as large a share of the markets as possible. By promoting new and different products where the US has an advantage, growth in the market place will more directly flow to the US. Additionally, assuring that every market has a sufficient number of importers and distributors who are well educated about US dehy, its quality and versatility will help the US to capture a larger share of the market.

#### *Expand the use of US dehydrated potatoes in international food assistance and development programs.*

Dehydrated potatoes are not able to compete with traditional starches such as rice, corn and wheat on a cost basis for the large scale feeding efforts under international food assistance. However, dehydrated potatoes do provide very unique nutritional, preparation, storage, and transportation advantages that make them preferable for a number of specific feeding applications such as therapeutic, weaning, emergencies and as fortified blended foods. The unique characteristics and benefits of dehy must be taught to the US government (USG) officials and the employees of the Private Voluntary Organizations (PVO) carrying out the work. Studies that document these benefits and demonstration projects that prove them will be undertaken. Training through seminars, RTMs, materials, etc. must be ongoing given the high personnel turnover at the PVOs.

Dehydrated potatoes can also play a role in sustainable development efforts, which are the current focus of much of the US government’s foreign assistance. Dehy can be used in local food processing and blending operations which create jobs and purchase local agricultural products. Dehy can be sold by local potato farmers between their crops of fresh potatoes to sustain them through these lean periods and provide them with alternative income. The USPB will partner with USG agencies and PVOs carrying out this work to prove the effectiveness of dehydrated potatoes in this area.



### *Continue market access and regulatory work.*

Increased access to foreign markets will greatly expand exports of US dehydrated potatoes. Tariffs, quotas and other barriers to trade will be addressed in concert with the National Potato Council, state potato grower organizations and the America Potato Trade Alliance. The USPB is uniquely positioned to work on these issues from within the foreign markets as well as providing information to USG officials.

### *Build a foundation of technical information on new uses and applications for dehy and the benefits.*

In order to take advantage of all of the opportunities where dehy is not currently used the USPB must document these uses. The technical information needs to provide basic information on how to use the product and the benefits of doing so. The research needs to be conducted in the markets to take into account differences in climates, products, foods, tastes, needs and desired benefits.

### *Work with US processors to help them take advantage of the international opportunities.*

The US processors' resources for international marketing are limited, so the USPB and its foreign representatives must work to assist them take advantage of these opportunities.

## Target Markets

### Growth Markets

#### **Japan**

As Japan is the largest net importer of food products in the world and the third largest market for US agricultural products, it is very important to continue to work with the various sectors to ensure US dehydrated potatoes are a part of this growth. Japan remains a top priority for US dehy potato products and continues to grow, even off of a large base. Dehydrated potato exports were up 16% by volume over the FY06 – FY10 time frame.

Although the snack sector has matured, the USPB will need to continue trade contacts in this sector in order to ensure continuation of US sales and monitor any problems which may arise. The advantages and benefits of dehy are many and show wide application in the Japanese market. Sectors such as food service, food manufacturing, and mass catering, especially those targeting hospitals and nursing homes as Japan's population continues to age, hold excellent potential. Reports show that people over 65 now account for one-fifth of the population and are expected to make up a quarter of the population by 2015. Additionally, convenience stores (CVS) and supermarket delis are now taking advantage of consumer trends and continue to have a large impact on Japan's food market. Promoting products such as slice, dice and shreds which were mostly prohibited in the past due to the sulfite tolerance level regulation, have shown success and will continue to increase the sales of US dehy and present opportunities for net new sales in these new channels. More emphasis on products such as "instant mashed potatoes" needs to be implemented. In the bakery sector, smaller retail bakeries are starting to experience the benefits of utilizing dehy and more education and awareness needs to continue in this sector.

#### **Mexico**

Although exports to this market reached an all time high of 37,245 metric tons (MT) in FY06, they declined by 65% in three years, reaching 12,850 MT in FY09. However, they rebounded to 20,671 MT to overtake Japan and regain the lead as the largest US dehy export market in FY10. Mexico holds excellent potential for continued growth, especially with the close proximity to the US, lack of tariffs and the fact that Mexico does not have a dehydration industry. Overall, the snack sector continues to grow as snack food manufacturers develop new and innovative potato snack products, especially

catering to the “healthy market”. Potatoes represent 26% of the total snack food market. However, US dehy processors have established relationships with the manufacturers and the Board’s role is limited. The direction given from the industry is to open up new sectors such as bakery and retail.

Excellent potential for growth remains in the bakery sector and is becoming a niche market for dehy. The numerous benefits of utilizing dehy in bakery applications is gaining increased recognition through seminars, educational materials and the partnership with CANAINPA, a bakery association with 40,000 members throughout Mexico. The most important attribute to the bakers is increased yield which directly affects profitability. Several new products have been developed using dehy for this purpose, but it is not widely announced due to the fact that most companies do not want their competitors or customers to know that they are selling “more water”. The challenge in this sector remains that only small amounts of dehy are utilized in the bakery products. The retail sector has become an excellent opportunity for US dehy with several US companies represented in the market. With the above average acceptance and per capita consumption of potatoes being significant, education regarding the convenience of US retail dehydrated potatoes needs to be expanded. New products such as slice, dice and shreds need to be promoted in addition to the main products of standard flakes, flour, standard granules and “instant mashed”. These need to be introduced throughout new target sectors and channels such as food service and mass catering which have outstanding upside potential due to the fact that dehy is convenient, has consistent quality and substantial labor savings.

#### **South Korea**

South Korea has excellent potential for new snack, bakery and other food products made with US dehy or utilized as a standalone product such as mashed potatoes, as noted time and time again. However, a tariff rate quota that only allows 60 MT of flakes, flour and granules into the market before a 304% tariff is applied continues to severely impact dehy exports to that country. The initial completion of the KOR-US Free Trade Agreement was announced in April 2007 and again in December, 2010. The US free trade agreement with Korea offers hope of eliminating the TRQ for dehydrated potatoes, if it is passed by the legislatures in both countries. In the meantime, ways to work around the current regulations must be pursued.

Though the ability to circumvent this TRQ through the export of mixtures has resulted in excellent growth, it is still much more difficult for R&D personnel to develop new products as it also requires developing a “blended dehy product” to meet import regulations. Large snack food manufacturers working directly with US dehy processors have been successful in developing proprietary blends specifically for snack food applications in the past. However, healthy eating trends and food safety issues such as Acrylamide have dampened overall snack food sales. The TRQ does not apply to slice, dice and shredded products and despite a relatively high tariff of 27%, this sector offers possible opportunities for net new business, especially in the HRI and food manufacturing sectors. In addition restaurant chains are decreasing the functions of their onsite restaurant kitchens; moving to outside food processors or partially prepared food items. These food processors vary from small to large size manufactures and offer opportunities from restaurant menus to bakery items.

#### **Indonesia**

Indonesia is among the top five dehy markets in the USPB’s target countries and often competes with the Philippines and Malaysia for #3 and #4. Great strides have been made within the last several years despite the lack of supply and high prices over the last year. The market is aware of US dehy and the various products in general, however, additional education is needed. For those segments that are familiar with dehy and the various choices of products, additional technical information is needed to highlight the benefits and opportunities of using dehy in a variety of food applications localized for the Indonesian palette. Activities should be targeted to support the dehy products already in the market.



The snack market is dominated by large players such as PT Indofoods (Frito Lay) and Garuda Foods and is fairly mature. The USPB has less opportunity to affect usage in this sector as these companies are well educated about dehy and price seems to be the major factor in their purchasing decisions. The best return on investment continues to be focusing on new sectors such as bakery and food service. The bakery industry continues to grow with several thousand small, retail bakeries throughout Indonesia. According to the Jakarta Post, 6% growth is forecast per annum from 2008-2012. Both the food service and hotel/restaurant/institution (HRI) sectors are expected to grow at 7% per annum. As they normally prepare their food in large quantities, dehy is a convenient choice and suitable solution for these operations. Although Indonesians spend half of their income on food, only 10% is spent on processed food and beverages. To address their price conscious concerns, food manufacturers are producing smaller, no frills packaging. Dehy can fit nicely into various food applications as an extender, providing more servings per recipe in items such as fish balls, hamburger patties and bakery items.

### **Malaysia**

The USPB previously programmed Singapore and Malaysia together due to their close proximity. In FY08 the USPB separated these markets and focused on Malaysia, the larger of the two. Exports to Malaysia have continued to increase since FY05. However, exports declined approximately 25% in FY09/10 to 1,333 MT. This is mainly attributed to increases in US dehy prices.

For now, the use of and opportunities for dehydrated potatoes is primarily limited to snack food producers in Malaysia and to a lesser extent, bakeries. Considerable potential for growth exists within these groups as current product utilization is very low and there is a lot of room for new innovative products. With the increase in the HRI and foodservice sectors, new menu concepts utilizing US dehy and designed specifically for local taste profiles and preferences need to be developed and promoted. Products such as mashed, slice, dice and shredded potatoes, which historically have not been utilized in this region need to be introduced and more education regarding the benefits of these products, such as decreased labor costs and increased quality and consistency of menus, needs to be conducted. Food manufacturers need to be targeted as well, with technical information developed specifically for this segment.

### **Philippines**

Historically, the Philippines has been the most developed market within ASEAN due to the fact that the dehy program was started in this country in 1999. However, continual lack of supply and high dehy prices has plagued exports to this market. Overall dehy usage in the Philippines increased by 80% over FY06-10 with China and Europe both increasing market share while US dehy exports declined by 28%.

For now the use of and opportunities for dehydrated potatoes is primarily limited to snack food producers and to a smaller degree bakeries. With the worsening economic climate in the Philippines, growth in sweet and savory snacks continues to decelerate. New developments in the snack sector are geared towards helping consumers maintain a healthier lifestyle. With schoolchildren accounting for the bulk of chip sales, aggressive campaigning from health institutions and dairy product manufacturers against junk food could hamper the sectors' growth. Overall, the snack industry is extremely price sensitive and although snack food manufacturers recognize the outstanding quality of US dehy, it cannot be offset by the significantly higher prices in comparison to our competitors. The bakery sector holds excellent potential for growth especially with the past partnership with the Chinese Filipino Bakery Association. Additional time and resources need to be allocated to pursuing new sectors and channels, such as the HRI and food service industries. Dehy has proved to be an excellent ingredient in a variety of recipes. The benefits of using dehy in this sector, relevant to Filipino tastes and preparation processes, needs to be researched and the results widely disseminated. More focus on the HRI and food manufacturing sectors will yield expanded opportunities.

### **Thailand**

The strong food culture and relatively robust agricultural sector in Thailand has limited the introduction of western cuisine and imported foods, but with greater openness is coming the expansion of quick service restaurants and large scale retail outlets which will increase demand for US potato products once the economy turns around.

For now, the use of and opportunities for dehydrated potatoes is primarily limited to the retail market, where the US is well represented. The number of supermarkets and hypermarkets continue to grow in residential areas. The education of “instant mashed potatoes” to the Thai consumer will be beneficial in addressing the lack of knowledge of this product in the market. Once the Thai consumer is educated, the food service sector can also be targeted. Considerable potential for growth exists within the snack food sector as well as other sectors such as bakeries, food manufacturers and HRI as current product utilization is very low and there is a lot of room for new innovative products. Although bakery research and various food service recipes have been developed for the region, new menu concepts and application studies utilizing US dehy designed specifically for local taste profiles and preferences need to be researched, developed and promoted.

Thailand has negotiated free trade agreements with Australia, New Zealand and China, all of which call for tariffs on potatoes and products to drop to zero over time. The US has the potential to lose the market for dehydrated products to these other producers as the differential between the 30% tariff on the US product becomes too great.

### **China**

China continues to be a developing, but challenging market for US dehy. Dehy exports to China increased over 200% in 06/07 from a very small base. This was, however, during a short crop year for European producers which supply the Chinese market very cheaply. Dehy exports to China have since decreased 80% in FY10, returning to FY03 levels. Imported dehy increasingly faces much stiffer domestic competition and dramatic differences in domestic versus imported product prices. Additionally, regulatory issues continue to plague dehy exports to China as the country wrestles with the whole issue of food safety and unfairly penalizes imports.

China is the largest potato producer in the world. However, the growing domestic demand for potatoes and potato products still has not been satisfied due to the lack of advanced technology and proper management, which results in low yields and poor quality. There are 12 dehy processors producing potato flakes in China, with the total production capacity of these plants at approximately 100,000 MT annually. The increased Chinese dehy production (all dehy product types) will be a competitor not only in China but to all dehy target markets.

The food manufacturing industry is growing and opportunities exist to expand usage in the snack, bakery, noodle and other manufacturing areas. The bakery sector alone grew more than 30% both in volume and revenue. The hotel restaurant and institution (HRI) sector presents significant opportunities, as well, with a 25% growth rate in 2008. The retail sector grew 22% in 2008. While the potential is huge the constraints are also significant. Current awareness and knowledge of dehy usage, applications and opportunities is very low. This market is extremely sensitive to price, a disadvantage that has been heightened by higher US dehy prices over the past few years.

### **Vietnam**

Vietnam is still a relatively poor country with GDP per capita of only \$1,024 in 2008. However, the tremendous economic growth of the past 10 years has created a vibrant and growing middle class that is demanding more and more imported products. The affinity to US products is very positive. The demographics of the Vietnamese population are enticing with 60% of the population younger than twenty-five years old. These young customers are brand-conscious, watch TV, are internet savvy and have begun demanding larger quantities of US food products. Though the western food service sector is small, it is growing very rapidly, especially for chicken based menus such as KFC. Two income Vietnamese households are also increasing in urban areas such as Ho Chi Minh City and Hanoi.



This is reflected in the emergence of convenience packs: pre-cut consumer packs of fresh vegetables and noodles ready for quick meal preparation. Dehy potatoes have excellent potential in snacks, food manufacturing as well as retail applications.

### **International Food Aid and Development Programs**

According to the United Nations World Food Program (WFP), more than one billion people in the world do not have enough to eat, more than 90% of whom live in developing countries. Because of economic downturns, increased food prices, and other issues, there has been an increase in undernourished people of 115 million people in 2007-2008. They estimate that more than 6.5 million children (more than 5 million under the age of five) die each year related to malnutrition/hunger-related diseases. An estimate of the cost to economic development related to under-nutrition is between \$20-30 billion per year. The Lancet five-part series<sup>1</sup> reviewed evidence on the impact of malnutrition and noted that nutrition was regarded as an afterthought in development priorities and that it is underemphasized by both donors and developing countries.

The largest government donor of humanitarian assistance<sup>2</sup> is the United States at \$24 billion, with Japan, the United Kingdom, Germany, and France contributing a combined total of \$55 billion annually. As government assistance is declining<sup>3</sup>, additional attention is being paid to the potential for private sector involvement in developing effective solutions. A WFP policy brief on “Scaling up Nutrition” was published in March 2010 that outlined the framework for proposed actions<sup>4</sup> that included private sector interests in the “production of high quality foods – including those fortified with micronutrients”, applying marketing skills to nutrition messages, employment, and income generation.

The US government provides food aid through four program authorities: the Food for Progress Program (FFPr); the McGovern–Dole International Food for Education and Child Nutrition Program (FFE); Public Law 480; and Section 416(b). USAID administers the Public Law 480, Title II program. USDA administers the other food aid programs and the Bill Emerson Humanitarian Trust. US funded food aid resources are being directed to several “priority countries” for programs that address the needs of chronically ill individuals, including people living with HIV/AIDS. The priority countries are some of the poorest and most politically unstable in the world.

Dehydrated potatoes offer an excellent solution to various sectors within the international food assistance and development arena. However, private voluntary organizations and US government entities lack the knowledge and understanding of the benefits dehydrated potatoes have to offer. To increase the US potato industry’s share of the international food aid market the USPB must work to explore the features of dehydrated potato products that best addresses the issues of food insecurity and malnutrition in its current form, as a fortified product, or as a base for blended and ready-to-use food products. The USPB must also work toward monitoring the acceptability and nutrition/health impact of the products where they are programmed and as a part of pilot projects in collaboration with PVOs. Strategies include partnering with stakeholders involved in food assistance and a variety of food programming activities. Information gathered will be disseminated among PVO partners and USG through educational workshops, one-on-one trainings and meetings, newsletters and website updates.

<sup>1</sup> The Lancet, “Maternal and Child Under-nutrition” Special Series, January 2008.

<sup>2</sup> Organization for Economic Co-operation and Development, 2007.

<sup>3</sup> Debt, AIDS, Trade, Africa (DATA) facts map, 2006-2007.

<sup>4</sup> World Bank, UNICEF, World Food Program. Policy Brief: Scaling Up Nutrition: A Framework for Action. Available: [http://www.inffoundation.org/pdf/Policy%20Brief\\_FINAL\\_%20FNB\\_v31n1.pdf](http://www.inffoundation.org/pdf/Policy%20Brief_FINAL_%20FNB_v31n1.pdf).

## *Potential Markets*

### **DR-CAFTA**

On August 5, 2004, the United States signed the United States-Central America-Dominican Republic Free Trade Agreement (DR-CAFTA) between the US and Costa Rica, El Salvador, Honduras, Guatemala, Nicaragua and the DR. The DR-CAFTA provides US exporters market access that is better than, or at a minimum, equal to, that given to other competitor countries, which has led to increased sales of US products in the region.

The HRI sectors in the DR-CAFTA countries are seeing increased investment and expansion in urban areas and beyond, fueled by a regional rise in tourism. As a result, high end hotels and restaurants will require larger amounts of imported food products, presenting opportunities for dehydrated potato products. Throughout Central America, consumers in urban areas are leading faster-paced lives, driving demand for convenient meal solutions and snack foods packaged for on-the-go consumption. As a result, sales of extruded snacks are rising. In Costa Rica, some snack foods which have traditionally been imported will instead be produced locally to minimize high freight costs. Expanded local snack production could mean more opportunities for the use of imported dehydrated potato products.

### **Other Market Discussion**

In addition to current target markets, the US dehy industry also recognized **Taiwan, Hong Kong and Singapore** as mature, or established, markets. That is, markets that do not require the assistance and programs of the USPB for exports to grow. US dehy processors have established relationships with customers and market access issues are not a barrier to trade.

Additionally, the dehy industry noted that the markets of **Brazil, Colombia, Argentina, Chile, Peru and Uruguay** should be monitored and possibly studied in the future as they may hold potential for export growth. **Africa** was also noted as an area where more market research is needed, especially for the growing snack sector.

## Dehydrated Potato Products

### *Export Market*

<i>Growth Strategy</i>	<i>Productivity Strategy</i>
<p><b><i>Increase demand for US dehy by introducing new products to the foreign markets and facilitating the inclusion in new products and channels.</i></b></p> <ul style="list-style-type: none"> <li>• Educate and train the trade on new uses and applications of dehy and the benefits</li> <li>• Strengthen the US position in the markets by introducing new dehy products and assisting importers and distributors to assure availability of US dehy</li> <li>• Expand the use of US dehydrated potatoes in international food assistance and development programs</li> <li>• Continue market access and regulatory work</li> </ul>	<p><b><i>Increase demand for and sales of US dehy through technical research and export readiness.</i></b></p> <ul style="list-style-type: none"> <li>• Build a foundation of technical information on new uses and applications for dehy and the benefits</li> <li>• Work with US processors to help them take advantage of the international opportunities</li> </ul>