

## **MolMas Inc. - Face mask manufacturer, Wichita, KS**

The Covid19 pandemic which started at the beginning of this year continues to impact how we live as a society. It exposed critical faults in our healthcare system and opened up faultlines that we never knew existed. At the root of all of this is one sad yet harsh reality - We do not have a strong manufacturing base for PPE or the equipment used to make PPE.

1. At the ground level, disposable masks, meant to be disposed off, after a single use to prevent cross infections were being reused. This goes against the prescribed and established practice for well over 50 years.
2. Our PPE supply chains including the machinery used to manufacture them, have been overseas dependent, whether for a simple mask or life saving ventilators. These supplies can be throttled at their origin like they were earlier this year, anytime!

As a startup, we have first hand experience of such challenges. We bought our machinery and raw material from overseas at many times the pre-covid prices. The raw material was available at a minimum of 30 - 65 times from overseas. Worse, the prices were moving upwards on a daily basis. Many times the spike driven by apparent market forces, surprised us also in how there was not much variation in prices across vendors.

3. Domestic production continues to not meet the demand. So, the scarcity continued for months! While that might have since improved due to imports, it is not very clear if we do have a handle on their quality due to lack of adequate quality controls on the manufacturing process. The supply itself continues to be at risk as it may be throttled yet again like it was before.

The above open questions leave gaps in our preparedness that need to be filled.

States competed with each other to procure PPE at any price. When availability itself is a challenge, quality and reliability are far secondary considerations.

How can we set up our economy, nay our society for resilience in this pandemic or God forbid, future disasters? Sirs, the simple mask was pioneered here in America in the 1920s. Why is it then that we have a scarcity of good quality masks? How can we achieve self-sufficiency in PPE and medical equipment?

The only way to achieve that confidently and reliably is to produce our own medical supplies and also the equipment used to manufacture them and while simultaneously securing our supply chains for raw materials as well.

### **Our journey**

The very first case of Covid in our country was identified in my home state, Washington, a few miles north of where I live. My wife, a physician, is contributing on the frontlines, in an underserved area. My younger daughter at the time was 9 months old, and still nursing. So, I asked my wife maybe selfishly, if she would consider quitting her job, because of the PPE

scarcity. She immediately shot me down reminding me that, that was what I had signed up for when I married her. So, I started looking for solutions to keep her and also her colleagues safe. Charity just wasn't going to cut it.

After some research it was clear that, to address the three critical issues of 1) availability, 2) product quality and 3) supply chain reliability, there was an urgent need to make face masks ourselves. The decision was not too difficult to take. So, we pivoted MolMas to manufacture face masks here in America!

That, however, was only the beginning of a whole range of new discoveries in the process. We quickly learnt a few things:

1. The bulk buyers of PPE, especially face masks, i.e. the state and local governments were by policy, procuring them at the lowest price. This meant that overseas product that is being dumped in the US ends up being the default choice. Ironically, an opportunity to strengthen our medical equipment supply chain is instead, benefiting the very same unreliable overseas manufacturers that we have over decades become accustomed to relying on.
2. On the direct to consumer sales front, was challenging as well. Well intended policies by our social media and e-commerce channels, aiming to prevent price gouging, were inadvertently stifling American manufacturers of the opportunity to directly advertise to the end consumer. As a consequence of the above two, our sales process was forced to rely on old fashioned cold calling to distributors, or on email campaign strategies from 20 years back.

As a net effect, American manufacturers like us are stifled not because we are unable to manufacture but because the sales channels are at the very best severely throttled.

### **Policy Recommendations**

I take inspiration from the race to the moon! 1961 propelled our dominance in space and the human race benefited. That is what inspired me, a first generation immigrant to come to America, to contribute positively to change. We look to this honorable chamber to evolve policy that unleashes the latent spirit of innovation, the prowess to manufacture at superior quality, the zeal to take the human race forward. Let us not ask "Can America do it?". America has done it multiple times before. Supportive policy making will accelerate it and get us to where we need to be quicker. Below are a few recommendations for consideration.

1. Treat self-sufficiency in the production of medical equipment, including PPE as a national priority just like we treat national security, economic security and some nations do food security.
2. Incentivize startups in the area. Democratize to release the animal spirits of the entrepreneurs and innovators.
3. Supportive policy in the short to medium term will help these startups thrive, especially in the face of relentless dumping of overseas product.

4. Avoid regulation - Statistically speaking, 99% of startups/new businesses die in their infancy, across sectors. Regulation during the startup phase can be detrimental to a very critical industry that is already under stress.
5. As opposed to blanket restrictions, consider publishing a nuanced data driven policy that specifies the quantities of products that could be allocated to exports.

### **Long term Benefits**

Innovations for the pandemic will directly help improve the quality of healthcare and quality of life of our baby boomers in specific and the society in general. Merely through requiring stricter quality checks and higher quality bar, cross contamination can be brought down. Innovation in this space will further reduce it thereby directly contributing to improving the quality of life and quality of care. That will in turn reduce the stress on medicare and medicaid.

By going beyond incremental process improvements the medicare, medicaid funding situation could benefit directly.

A major thrust of this nature will not merely improve our response to the pandemic, it will also result in secondary and tertiary benefits in the post-pandemic world much like the goal to land on the moon did.