

**Green State
Biochar uses local
waste wood to
produce
high quality
biochar.**



**GREEN STATE
BIOCHAR**

What is biochar?



What is biochar made from?



Nut shells



Cow manure



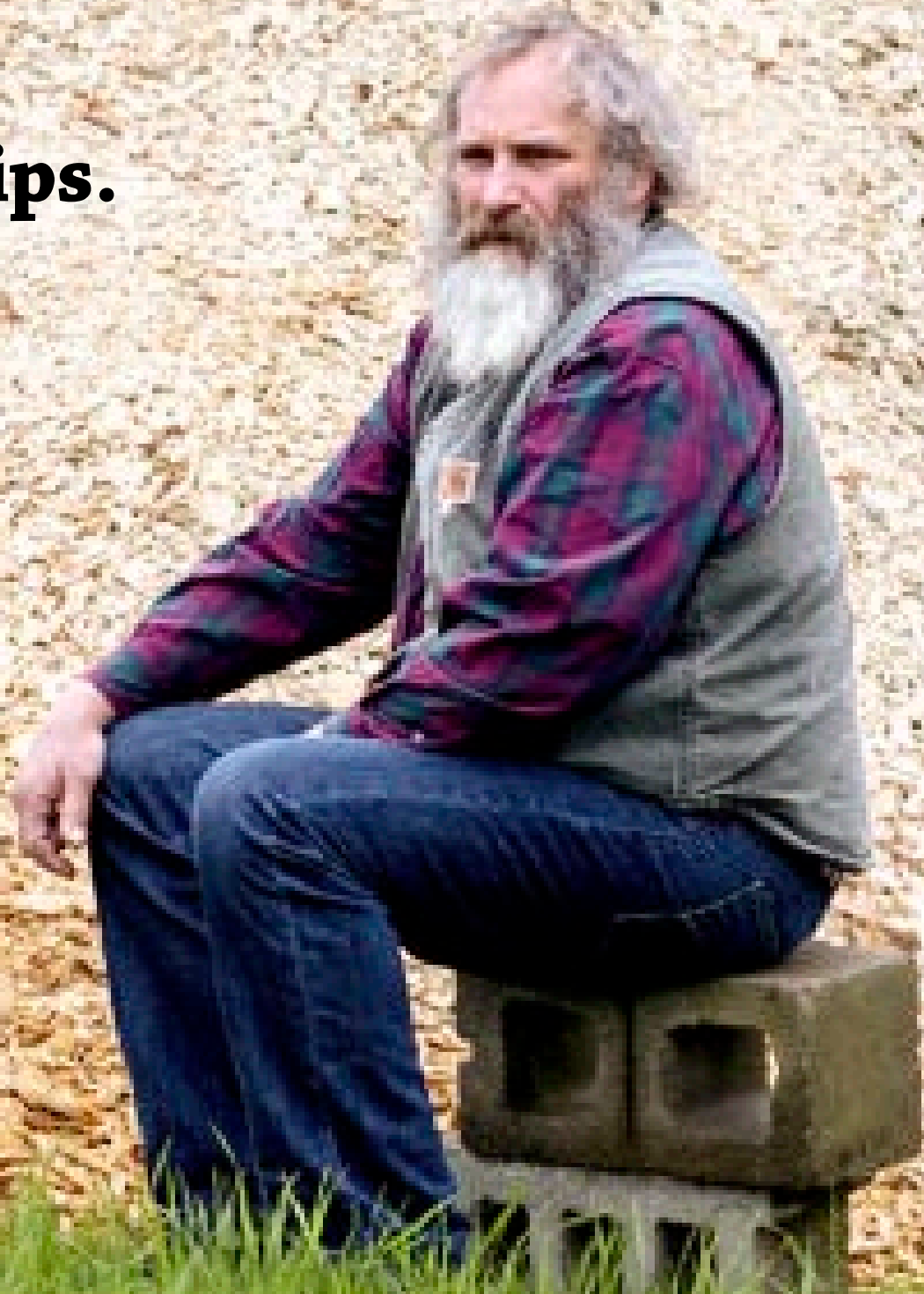
Poultry litter



Switch grass



We use waste wood chips.



How is biochar made?



What can biochar be used for?



Storm water runoff



Biochar

Plain Soil



Soil enhancement

As animal feed, biochar improves:

- digestion
- growth rates
- immunity
- feed and energy efficiency

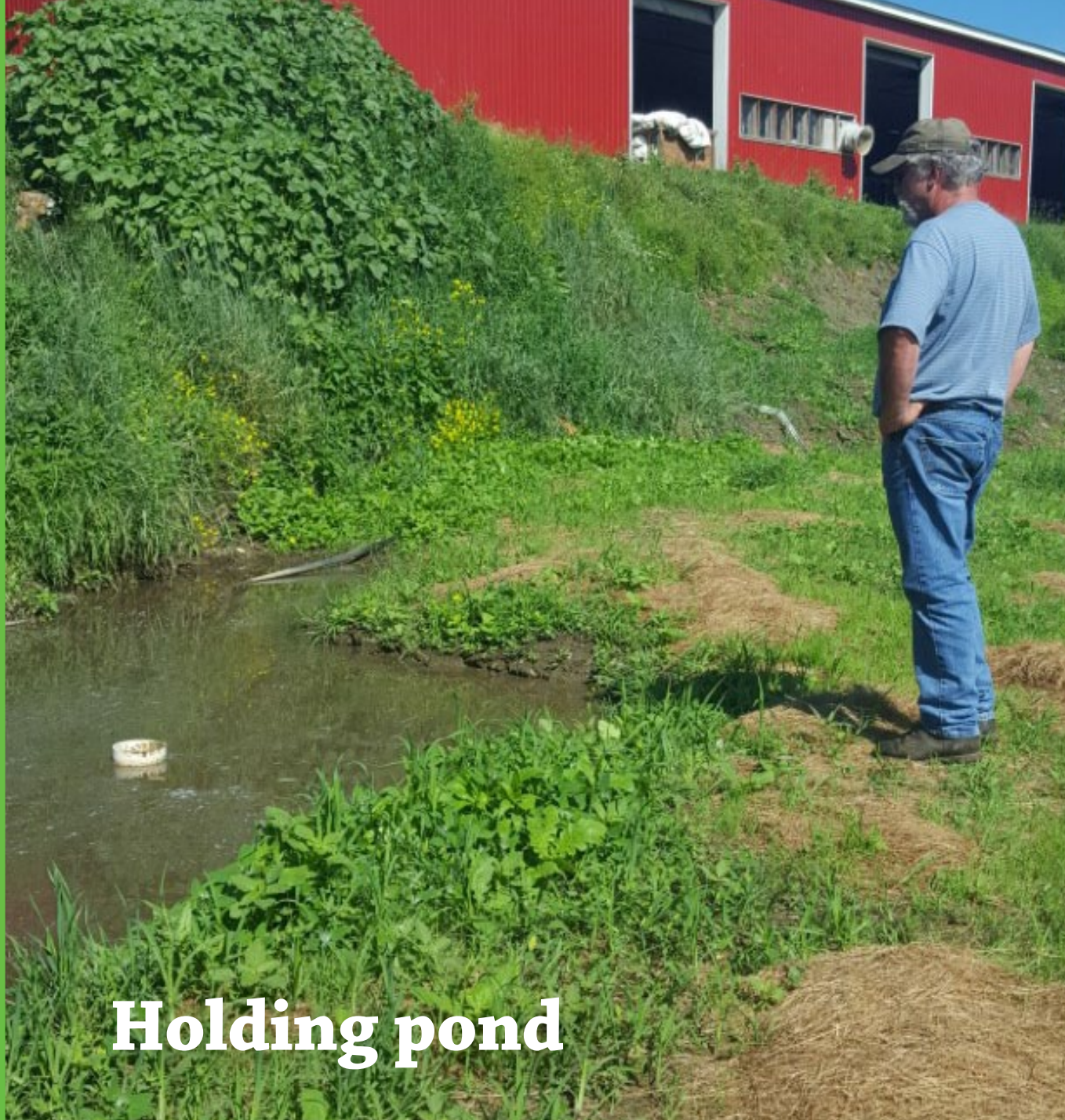
while reducing:

- methane production
- chronic botulism

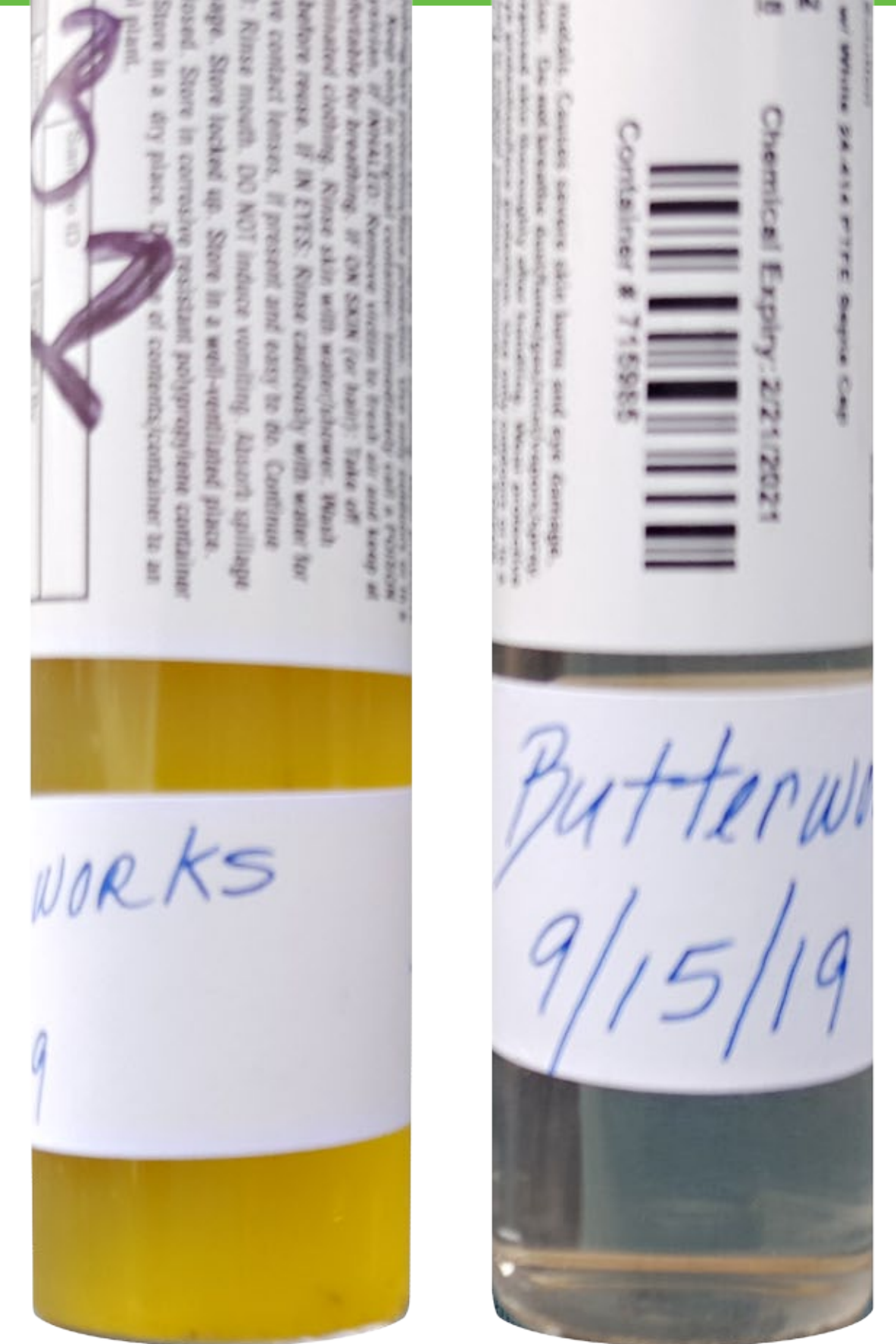
What are we using our biochar for?



Filter installation



Holding pond



PRE- and POST-FILTER
90-98% phosphorus capture

Vermont Agriculture Secretary Anson Tebbetts

Why Green State Biochar's filters matter!



Who are our customers?



FARMERS

- Increase crop yields
-
- Build healthier soils
-
- Filter media to capture phosphorus



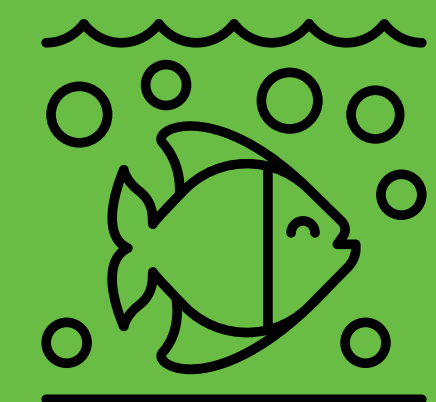
CONSUMERS

- Homeowners
-
- Gardeners
-
- Landscapers



LOCAL & STATE MUNICIPALITIES

- Filter media for heavy metals for mine reclamation and storm water runoff
-
- Riparian buffer zones at public boat accesses



ANYONE WHO USES, LOVES OR NEEDS CLEAN WATER!

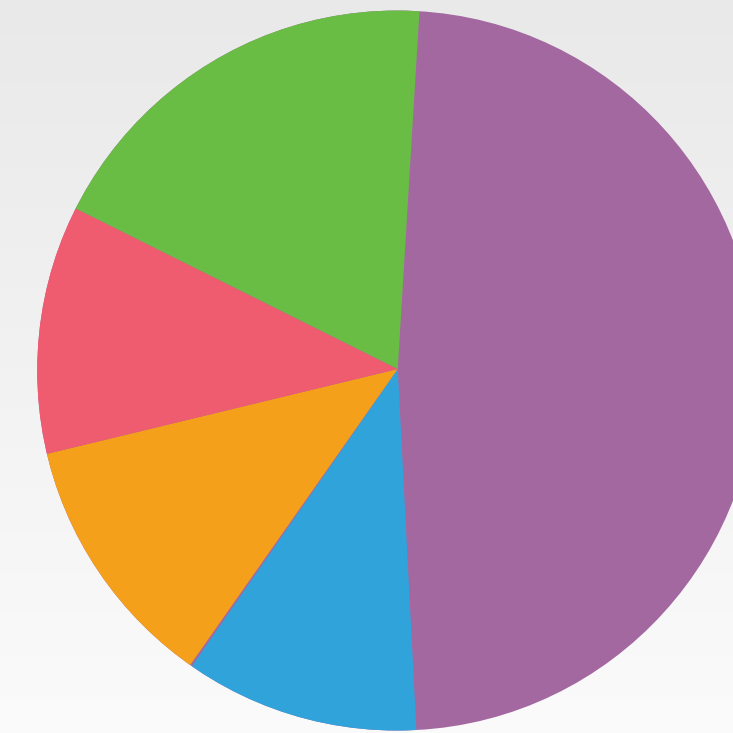
Projections

2020



INCOME/GRANTS

● Filter sales	\$185,000
● Biochar	60,000
● Grants	245,000
TOTAL	\$490,000



USE OF INCOME/GRANTS

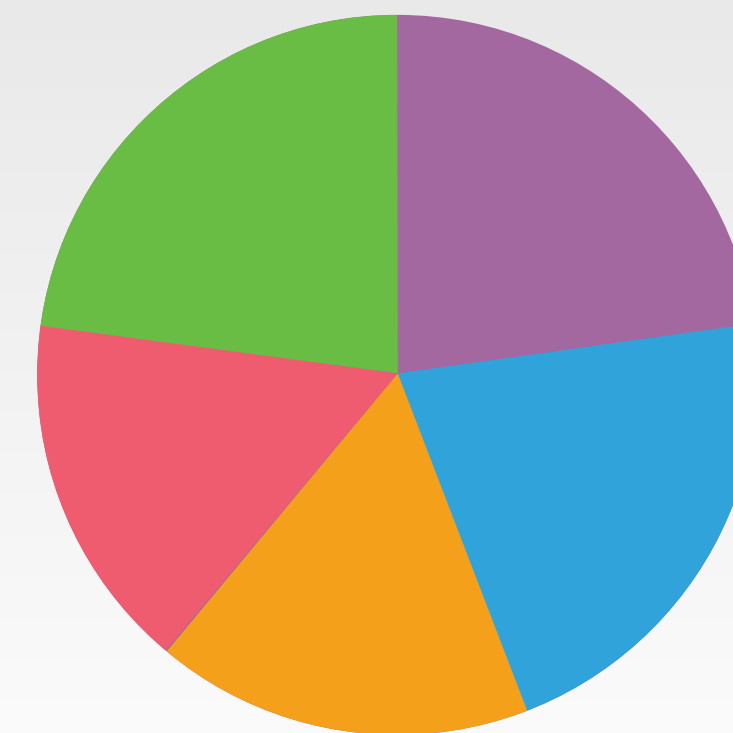
● G&A	\$ 98,600
● R&D	57,500
● Marketing/sales	63,000
● COGS	53,400
● 2 Kilns/building	245,000
TOTAL	\$517,500

2021



INCOME

● Filter Sales	\$370,000
● Biochar	97,000
TOTAL	\$457,000



USE OF INCOME

● G&A	\$107,000
● R&D	80,000
● Marketing/sales	73,500
● COGS	99,400
● New Technology	107,300
TOTAL	\$467,200

2022: 5-10% growth

What's next?

1. Bring attention to the **importance of reducing municipal waste streams** and transforming them into a usable resource.
2. **Secure funding** to build the Soil Conditioner Injection System.
3. Demonstrate that **not all manure injection systems are created equal**.
4. Continue working with our state's engineers to **get our filters into the best management practices program**.
5. **Continue to produce biochar and install filters** on farms to capture runoff.
6. **Build two new kilns** for which we have received funding.
7. **Market and sell biochar** to consumers.

Team Biochar



ROGER PION
GREEN STATE BIOCHAR
*Founding Partner
and Operator*



LUKE PERSONS
GREEN STATE BIOCHAR
*Founding Partner
and Operator*



DONNA PION
GREEN STATE BIOCHAR
*Founding Partner
and Business
Manager*



JOHN FORCIER
PRESIDENT,
FORCIER CONSULTING
ENGINEERS



**DR. HUGH
McLAUGHLIN**
*Recognized expert in
pyrolysis, gasification
and biochar*



TODD CAMPBELL
PRESIDENT, CLEAN
ECONOMY WORKS
*A transplant to
Vermont from a small
town in Iowa*

Thank you!

**The nation
that destroys its soil
destroys itself.**

FRANKLIN D. ROOSEVELT

**Upon this handful of soil
our survival depends.**

SANSKRIT TEXT, 1500 BC